Transportation Commission Meeting

November 17, 2021

7:00 PM
Virtual Meeting

AGENDA

1. Electronic Meeting Notice (see next page)
2. Public Comment (Not to exceed 10 min)
3. Minutes of the October 20, 2021 meeting
4. **Discussion Item: Blue/Orange/Silver Corridor Capacity & Reliability Study (BOS Study) – WMATA**
5. **Discussion Item: Complete Streets Repaving Feedback Form**
6. **Action Item: Consideration of Endorsement of FY28-29 CMAQ-RSTP Grants**
7. **Discussion Item: NVTA 70% Projects**
8. **Action Item: Consideration of Mid-Term Amendment to the Long-Range Plan for Vision Zero High Crash Intersection Improvements Project**
9. **Commissioner Updates**
10. **Items for Consent**
    A. Ellipse Reevaluation Study
    B. AlexMoves Survey
    C. Duke Street Traffic Mitigation Pilots
    D. TransAction
    E. Metro Train Derailment
    F. Bus Service and Ridership
11. **Other Business**

Public hearing items are so noted on the agenda*. The Commission may receive public comments on other agenda items at its discretion. When there is no public hearing, the Commission encourages written comments on agenda items be sent to transportationcommission@alexandriava.gov*

Next Meeting: December 15, 2021

Electronic Meeting Notice

Due to the COVID-19 Pandemic emergency, the November 17, 2021 meeting of the Transportation Commission is being held electronically pursuant to Virginia Code Section 2.2-3708.2(A)(3) and the Continuity of Government ordinance adopted by the City Council on June 20, 2020 to undertake essential business. All of the members of the public body and staff are participating from remote locations through a Zoom Webinar. This meeting is being held electronically, unless a determination is made that it is safe enough to be held in person in the City Council Workroom at 301 King Street, Alexandria, VA. Electronic access will be provided in either event. The meeting can be accessed by the public through:

The meeting can be accessed by the public through:
https://zoom.us/webinar/register/WN_a9prx-vFRY6o3IJBWLO99g

Webinar ID: 917 0937 8539
Passcode: 068073

Or join by phone:
301 715 8592
Passcode: 068073

Public comment will be received at the meeting. There will be a public comment period at the beginning of the meeting and written testimony can be provided until 3PM on 11/17/21 to Megan.Oleynik@alexandriava.gov

The City of Alexandria complies with the terms of ADA. An individual with a disability who wishes to request an accommodation may contact the Department of Transportation and Environmental Services at 703-746-4086 or TTY/TTD 703-838-5056.

City of Alexandria
Transportation Commission and Environmental Policy Commission Joint Work Session

Joint Meeting

October 20, 2021
6:30 p.m.
Virtual Meeting

MINUTES

Commissioners Present: Councilman Canek Aguirre**,** Chair Melissa McMahon**,** Commissioner Casey Kane, Commissioner Bill Pugh, Commissioner Lawrence Chambers, Commissioner Oscar Gonzalez, Commissioner Bruce Marsh, Commissioner James Maslanka, Charles Sumpter for Councilman John Chapman.

Staff Present: Christopher Ziemann - Transportation Planning Division Chief, Megan Oleynik - Transportation Planning Division, Khoa Tran – Office of Environmental Quality Division, Bill Eger - General Services, Jose Ayala - Planning & Zoning.

Audio/Visual presentation is available online:
https://www.alexandriava.gov/TransportationCommission

Chair McMahon called the Transportation Commission meeting to order at 6:30 pm.

1. **Electronic Meeting Notice**

2. **Public Comment Period**
   No public comment.

3. **September Meeting Minutes**
   Motion to accept the minutes as amended: Commissioner Pugh
   Motion to accept the minutes: Commissioner Gonzalez
   Motion carries unanimously with Commissioner Marsh abstaining due to his excused absence and Commissioner Maslanka having not yet been confirmed.

   Chair McMahon welcomed Commissioner James Maslanka to the Transportation Commission.

4. **ACTION ITEM: FY 2023 Budget Priorities**
   ISSUE: Consideration of submission of a letter to the City Manager pertaining to the Commission's budget priorities for FY2023.

   RECOMMENDATION: That the Transportation Commission endorse the draft letter to the City Manager.

   DISCUSSION: Megan Oleynik, Urban Planner, presented on priorities discussed last month and feedback received from Commissioners emails.

   Commission Discussion

Commissioner Kane expressed support for adding two additional Complete Streets Staff to have a total of four Complete Streets Staff.

Commissioner Gonzales and Marsh expressed that the exact number of staff may not need to be specified.

Commissioner Pugh stated that the Energy and Climate Change Action Plan (ECCAP) projects could be informed by staff as that project progresses during the year.

Chair McMahon also expressed support for requesting two additional staff.

Motion to endorse letter to the City Manager with the request for two additional Complete Streets Staff: Commissioner Kane
Second: Commissioner Chambers Motion carries unanimously.

5. <u>ACTION ITEM: Consideration of a Letter of Support for NVTA 70% Projects</u>
ISSUE: Endorsement of grant applications to the Northern Virginia Transportation Authority (NVTA) for transportation projects eligible under the 70% Discretionary Grant (FY2026-27).

RECOMMENDATION: That the Commission review and endorse staff's recommended projects for the NVTA 70% Discretionary Grant and the VDOT TA and Revenue Sharing programs.

DISCUSSION: Christopher Ziemann, Division Chief, presented on the request for support of the NVTA 70% Grant application.

Commission Discussion

Commissioner Kane asked that the projects be brought back to the Commission for discussion items in November.

Motion to endorse the letter of support for the NVTA 70% Grant: Commissioner Kane
Second: Commissioner Marsh
Motion carries unanimously.

<u>Adjournment</u>
At 6:56 pm, the Transportation Commission adjourned.

Transportation Commission – Environmental Policy Commission Joint Work Session

Environmental Policy Commissioners Present: Chair Kathie Hoekstra, Vice Chair Michael Olex, Commissioner Eldon Boes, Commissioner Cynthia Elliott, Commissioner Edith Cecchini, Commissioner Brendan Owens, Commissioner Alexander Clark, Commissioner Michael Bahleda, Commissioner Nicole Heckman, Commissioner Marta Schantz.

A. Nexus between Transportation and the Environment, Typical Issues and Strategies for On-road Transportation, Baseline Alexandria transportation sustainability and climate metrics

Work session Discussion:

- City needs to make sure policies include the incentives for people who do not have the same resources that others do.
    - Under the broader heading of "just transition" there are many good things that have been written exploring strategies to support communities that will be facing a disproportionate share of the burdens associated with the shifts necessary to decarbonize our built environment.
- Importance of commercial side of the ground transportation equation - they can be very influential; may have to influence at the state and federal level as well as local.
- Challenge of electrification charging infrastructure is not small - must make it easier, not just for SFDH, but for multifamily too and public and subsidized.
- Battery quality and charging time will influence feasibility.
- How do the transportation solutions differ between people who can mostly stay local day to day, and those who have to travel longer distances regularly?
- Electric vehicles are good, but there are major environmental damage and human rights abuses happening to make the batteries these cars need… we should look at our transportation solutions as holistically as we can.
- There is almost no way to get to the EV rates we need to achieve a full GHG solution, because fleet doesn't turn over fast enough. We cannot pin our hopes to that alone. We can't subsidize our way into an EV fleet because it will be too expensive.
- Travel demand and Reducing VMTs - how do we make that more powerful? More possible? Bigger shift? How do we make walking, biking, and bus easier and more attractive than driving?
- Does City have data on mode use by income, etc. to see what our equity baseline is?
- If you think about energy as an ecosystem, cars with batteries in them, they are intermittently available to the grid, we should think of them as being a part of that network. Leveraging the batteries is critical perspective on the future purpose of the battery in the vehicle.
- Mode shift is underrated in the COG documents and most discussions; there are cities across the world that achieve non-motorized mode split much higher than we do
- Business as Usual is nowhere near good enough. Our existing policies must become a lot stronger to help us get where we need to go.

B. Strengths and Weakness of Relevant Current City policies at this Nexus (EAP 2040, AMP, Electrification) and other upcoming City Activities Relevant to Transportation and sustainability

Work session Discussion:

- Many land use plans are very car centric still
- We need to give people more realistic options when we build out these places
- The question of parking requirements, how to accommodate people who own cars? Reducing or eliminating parking is always a controversial proposal.

- Are we thinking about transportation too narrowly?
    - The AMP: Small percentage of trips taken are within Alexandria, a lot of the places people want to go are not here. Transportation is a regional issue, but the region has a history of not having the same priorities across jurisdictions.
- Establish policies that themselves create constituencies for good climate policies. If you build a new development without parking, the people who choose to live there have opted to live in a place with no parking. They become a supportive constituency by default; their priorities are already aligned.
    - The EAP Action item 7.1.3 is "By FY2023, develop a checklist for transportationstaff working on development review to be used in both residential and commercial review processes to incentivize less carbon-intensive modes of transportation and mobility options."

C. <u>Energy and Climate Change Action Plan process, Recommended Inputs for Transportation Sector, where TC and EPC can provide value</u>

Bill Eger, Energy Program Manager, presented on the Energy and Climate Action Plan process and the recommended inputs for the Transportation Sector.

Work session comments:

- Focus on what the most pragmatic actions are that the city can do to reduce carbon
    - We have a huge collection of existing regional actions, but we need the analysis to see what's working, what's impactful, what hasn't been done yet here that should be.
    - Process is aiming for SMART objectives/targets.
- The current graphs seem to focus on EV more than mode shift - maybe this needs to shift.
    - One of the reasons for this is the reliance on the regional traffic models which don't handle mode shift well.
- Do we have an opportunity here to push regionally for a stronger, long lasting, hybrid telework place going forward because it's been a big impact on the transportation system? Makes sense to articulate what this looks like as an GHG reduction opportunity in the plan.
- Important to bring in the business owner's perspectives to this plan.
- The plan doesn't have enough resources for proper community engagement
    - Therefore, EPC and TC commissioners are important conduits for this plan to the community
- This plan must provide actionable directive from council that change other conflicting or weaker city policies.
    - The EAP doesn't right now commit to implementing the ECCAP until 2035. That'stoo late.

D. <u>Vision for Future Collaboration</u>

Worksession Discussion:

- Maybe there is a subgroup between EPC and TC that can meet more regularly to continue the discussion and keep it timely.
- What do we mutually want to have done soon:
    - Complete Streets funding
    - ECCAP funding
- EPC schedule revised so that in the spring there is a strategy look back and forward, then a retreat moving it to the spring to get it in front of the next year's budget and legislative planning process.
- Opportunity to encourage City Council to be more progressive on these topics
- Opportunity to collaborate on climate and maybe other specific actions.
- Want to encourage City Council to have the same level of concern about Climate Change

Two outcomes to pursue together:

1. Work to schedule annual work sessions together than make sense in terms of theirstrategic timing in the year.
2. Begin a tag-team council briefing calendar where we plan conversations with council members to go over key issues and opportunities of interest to both commissions.

Adjournment

At 9:03 pm, the Joint Meeting adjourned.

City of Alexandria, Virginia

MEMORANDUM

DATE: NOVEMBER 17, 2021

TO: MEMBERS OF THE TRANSPORTATION COMMISSION

FROM: HILLARY ORR, DEPUTY DIRECTOR, T&ES

SUBJECT: AGENDA ITEM #4 – BLUE/ORANGE/SILVER CAPACITY AND RELIABILITY STUDY

ISSUE: The Washington Metropolitan Area Transit Authority (WMATA) is conducting the Blue/Orange/Silver Capacity and Reliability Study to identify a project or package of projects to address capacity constraints and crowding, reliability concerns, a lack of operational flexibility, and threats to long-term sustainability in the corridor.

RECOMMENDATION: That the Transportation Commission provide input on the study process and proposed alternatives.

BACKGROUND: In 2019, Metro launched the BOS Study to identify a project or package of projects to address capacity constraints and crowding, reliability concerns, a lack of operational flexibility, and threats to long-term sustainability in the corridor. The BOS Study's approach aligns with federal process requirements and guidelines for planning large infrastructure projects, such as the National Environmental Policy Act (NEPA} and Planning and Environmental Linkages (PEL} studies. WMATA is currently presenting to elected officials and appointed bodies in advance the final planned public engagement phase.

DISCUSSION:
Key Highlights:

- Metro launched the BOS Study in 2019 on behalf of the region to develop and evaluate multiple challenges and opportunities within the corridor, including reliability, crowding, operational flexibility and cost-efficiency, and long-term sustainability.
- An extensive engagement process featured 27 meetings with stakeholders, including jurisdictional partners, 13 pop-ups at BOS stations, four public workshops, and an online survey.
- A cost-benefit analysis (CBA) for six alternatives has been completed. The alternatives and the CBA results will be presented to elected officials, stakeholders, and the public this fall to gather feedback to inform and support the selection of a locally preferred alternative (LPA).
- The BOS Study process was designed according to federal requirements and guidelines, to ensure Metro and the region can pursue federal funding if desired.

- The study forecasts that the BOS corridor will add 37% more people and 30% more jobs by 2040, which is likely to increase ridership.
- The pandemic has changed ridership patterns making it much more challenging to forecast future transportation demand. However, because an effective solution to the challenges in the corridor could take 10 to 20 years or more to deliver, project development work will continue on the LPA unless and until it becomes clear improvements will not be necessary.

ATTACHMENTS:

Attachment 1: September 9, 2021 WMATA Finance and Capital Committee Docket Item

Finance and Capital Committee

Information Item IV-A

September 9, 2021

Blue/Orange/Silver Capacity & Reliability Study

Washington Metropolitan Area Transit Authority

Board Action/Information Summary

○ Action ◉ Information	MEAD Number: 202298	Resolution: ○ Yes ◉ No

TITLE:

Blue/Orange/Silver Capacity & Reliability Study

PRESENTATION SUMMARY:

This information item will brief the Board on the Blue/Orange/Silver Corridor Capacity & Reliability Study (BOS Study).

This briefing describes the study's purpose; the challenges and opportunities; how potential solutions were identified; the range of alternatives currently under consideration; and next steps towards the identification and selection of a "locally-preferred alternative" (LPA).

PURPOSE:

To brief the Board about planning work completed to date and the current status of the BOS Study, the process and next steps in advance of additional public engagement and outreach to elected officials.

DESCRIPTION:

In 2019, Metro launched the BOS Study to identify a project or package of projects to address capacity constraints and crowding, reliability concerns, a lack of operational flexibility, and threats to long-term sustainability in the corridor. The BOS Study's approach aligns with federal process requirements and guidelines for planning large infrastructure projects, such as the National Environmental Policy Act (NEPA) and Planning and Environmental Linkages (PEL) studies.

More information about the BOS Study including previous studies related to the BOS corridor can be found at https://www.wmata.com/BOSstudy

Contractors and Interested Parties involved in the BOS Study: **HNTB** (prime consultant), **Cambridge Systematics**, **Fehr and Peers**, **Foursquare Integrated Transportation Planning** (FITP), **GeoConcepts Engineering**, **KGP Design Studio**, **Kimley-Horn and Associates**, **Mercado Consultants**, **Rhodeside & Harwell**, **VHB**

Key Highlights:

• Metro launched the BOS Study in 2019 on behalf of the region to develop and evaluate multiple challenges and opportunities within the corridor, including reliability, crowding, operational flexibility and cost-efficiency, and long-term sustainability.
• An extensive engagement process featured 27 meetings with stakeholders, including jurisdictional partners, 13 pop-ups at BOS stations, four public workshops, and an online survey.
• A cost-benefit analysis (CBA) for six alternatives has been completed. The alternatives and the CBA results will be presented to elected officials, stakeholders, and the public this fall to gather feedback to inform and support the selection of an LPA.
• The BOS Study process was designed according to federal requirements and guidelines, to ensure Metro and the region can pursue federal funding if desired.
• The jurisdictions forecast that the BOS corridor will add 37% more people and 30% more jobs by 2040, which is likely to increase ridership.
• The pandemic has changed ridership patterns making it much more challenging to forecast future transportation demand. However, because an effective solution to the challenges in the corridor could take 10 to 20 years or more to deliver, project development work will continue on the LPA unless and until it becomes clear improvements will not be necessary.

Background and History:

The BOS Study is an important step to address challenges that have impacted service on the Blue, Orange, and Silver lines for over a decade. Running three lines through one tunnel and set of tracks ("interlining") creates challenges for Metro and our customers, including crowding during peak periods, service reliability issues, a lack of operational flexibility, and threats to long-term sustainability.

This study is intended to identify a project or package of projects capable of mitigating those problems. At the completion of the BOS Study, a proposed project or package of projects ("locally-preferred alternative" or LPA) will be presented to the Board for consideration and approval. The BOS Study will provide the Board with a range of options, goals, data analyses, and feedback from the public and regional stakeholders. As project sponsor, Metro will continue to advance the LPA through project development and environmental review processes, but selection of the LPA will be guided by the region.

Discussion:

BOS Study Purpose and Need

The LPA will need to address multiple challenges in the BOS corridor:

Capacity and crowding: On-board and in-station crowding on the BOS lines have exceeded crowding standards during peak hours for years (pre-pandemic) regardless of service levels or systemwide ridership fluctuations. The jurisdictions have forecasted that the BOS corridor will add 37% more people and 30% more jobs by 2040. This anticipated growth is expected to increase BOS ridership by 2040 and worsen both the magnitude and the geographic extent of the crowding issues. Though full eight-car trains will help, they are not sufficient to solve the railcar crowding problems. Due to interlining and the maximum throughput of 26 trains per hour (TPH) per track, Metro cannot substantially increase service on any line without severely reducing service on the other lines. For example, Metro's most recent six-minute peak operating plan scheduled 10-11 Orange and Silver TPH, but only 5 Blue TPH. Metro cannot both improve headways and meet ridership demand on all three lines, so long as they are interlined.

Reliability and on-time performance (OTP): Due to interlining, delays on one line impact the other two. Severe delays can also impact the Green and Yellow lines, because the Blue Line is interlined with the Yellow Line in Virginia. SafeTrack and Metro's focus on reducing the State of Good Repair backlog, funded in part by dedicated capital funding, has substantially improved BOS reliability, especially delays caused by mechanical failure and track problems. However, nearly a third of delays over one minute can be attributed to customer activity, scheduling issues, and/or police and fire events.

Managing work zones and other disruptions: Reliability also means maintaining quality service during construction activities and single-tracking events The LPA should offer the potential to minimize the geographic extent and customer impacts of work zones and any other disruptions. However, the corridor has a limited supply of infrastructure that can reduce the size of work zones and single-tracking events, such as pocket tracks and crossovers.

Operational flexibility and cost-efficiency: Metro and the region have an interest in better matching service to ridership demand, in order to contain operating costs and better manage single-tracking events. However, the BOS corridor has a limited supply of infrastructure to support train turnbacks.

Long-term sustainability: Metro and the region are focused on the long-term viability of BOS transit services and achieving sustainability goals. Strategies and outcomes may include:

• Advancing Metro's Energy Action Plan and environmental goals;
• Improving farebox recovery by attracting new riders;
• Encouraging mode shift from single-occupancy vehicles to transit and nonmotorized options by providing a competitive travel option;
• Supporting transit-oriented development; and
• Expanding access to high-capacity transit and economic opportunities, particularly in vulnerable communities and equity emphasis areas.

Addressing this set of issues will likely necessitate a large-scale solution that requires regional resources, coordination and commitment. Such projects can take a long time to plan, design, fund, and build.

BOS Study Process

The region may decide to pursue federal funding for the LPA, so the BOS Study was designed according to federal requirements and guidance. It was structured to be consistent with Metro's Development and Evaluation (D&E) program as well as federal guidance on the National Environmental Policy Act (NEPA) requirements and pre-NEPA planning. It is modeled after the alternatives analysis process as described in federal guidance documents for NEPA and Planning and Environmental Linkages (PEL) studies. The BOS Study steps include, in order:

1. Identify the transit problems and set corridor goals (Complete)
2. Develop a full range of options to meet those goals (Complete)
3. Narrow the initial set of options to a final set of alternatives (Complete)
4. Evaluate the alternatives using a comparative cost-benefit analysis (CBA) methodology (Complete)
5. Select a locally-preferred alternative (LPA)

Consistent with federal NEPA and PEL requirements, each of these study stages has engaged regional stakeholders, including Metro's jurisdictional partners, and the public. For more detail, see the section on public and stakeholder engagement below.

Steps One through Four are complete and are presented in this briefing. The selection of an LPA will be brought for the Board's consideration after public engagement and outreach to elected officials this fall.

Placing the BOS Study in Context of Delivering Capital Projects

Depending on the LPA, it may take 10-20 years or more to plan, fund, and build. It may require a large capital investment that could be funded through the Federal Transit Administration (FTA)'s Capital Investment Grant (CIG) program. If the selected LPA is a major capital project and the region decides to compete for federal funding, project delivery would have to follow a required federal process that includes the following phases:

1. Pre-NEPA Planning (BOS Study)
2. NEPA/Project Development: 2-5 years
3. Engineering: 5-10 years
4. Full Funding Agreement (federal or otherwise)
5. Final design and construction: 5-10 years

Major capital projects require substantial planning, environmental review, and design prior to funding decisions/agreements. However, until there is a funding agreement, there is no commitment to build or deliver the LPA. Depending on the scale of the recommended LPA, this could be five, 10, or more years after the BOS Study concludes. Metro can stop or pause work at any time prior to that agreement.

Given the history of the corridor's capacity and reliability challenges, continuing to advance this study and subsequent project development will prepare the region to address those longstanding problems. While long-term ridership impacts of the pandemic are not known, crowding in BOS trains and stations always exceeded service standards during peak hours. Continuing to advance this work will ensure that the LPA is positioned to compete for federal funding.

Public and Stakeholder Engagement

The BOS Study has been guided by stakeholder and public input. Meetings were held with four technical advisory committees to help set goals for BOS transit, develop initial options and alternatives, and define the measures for evaluating and scoring those alternatives. The advisory committees and public input meetings to date include:

- Executive Committee of elected officials – two briefings
- Jurisdictional leadership committee – six meetings
- Jurisdictional technical committee – six meetings
- Metro leadership committee – six meetings
- Metro technical committee – six meetings
- Business and Community Stakeholder Committee – one workshop (before COVID)

The work of the advisory committees informed, and was informed by, substantial public input. Three rounds of public engagement activity were identified to align with key decision points in the study. The table below summarizes the public engagement timeline and activities to date.

BOS Study Public Engagement Efforts to Date			
Phase	Timeline	Activities	Purpose/Outcome
Round 1	Summer 2019	Street teams and pop-ups at 13 stations; handouts; website	Creating awareness of study, BOS transit needs/goals
Round 2	Winter 2019-2020	Four public workshops; online survey; presentations; handouts; station signs; press releases and social media blasts	Soliciting feedback on preliminary options, prioritizing outcomes, and gathering new ideas/options. Over 2,000 responses added 275 ideas/project concepts.
Round 3	Fall 2021 (tentative)	To be determined, but must be COVID-safe and emphasize online engagement tools	To communicate the final alternatives and results of the cost-benefit analysis, and gather feedback on selecting an LPA.

BOS Transit Goals

Following the identification of the purpose and need, those problems were translated into goal statements developed in close coordination with the stakeholder advisory committees. The LPA will need to attain these four goals and their associated objectives:

• Capacity: Provide sufficient capacity to meet ridership demand;
• Reliability: Improve reliability and on-time performance;
• Flexibility: Improve operational flexibility and cost-efficiency; and
• Sustainability: Support environmental sustainability and expand access to economic opportunities.

These goals and their associated objectives guided the identification of preliminary options, the winnowing of those options into a set of refined alternatives, and the performance measures used to assess the relative costs and benefits of those alternatives.

Identifying Potential Options

Once the goals were established, an initial set of options, or “project concepts,” was developed with the stakeholder committees. These were informed by analysis of multiple datasets including current and projected BOS ridership levels; major trip patterns and origin-destination pairs; current and future population and job densities; areas that might offer land development opportunities; and the location of vulnerable populations and equity emphasis areas. Additional requirements were that concepts had to serve major BOS origin/destination trip-patterns, explore options that would meet the four goals while limiting costs, and any rail concepts had to connect to an existing railyard.

Public input on the concepts followed. The public indicated their level of support for each project concept and prioritized their top three transportation outcomes.

They also were able to draw or describe their own project concept, which resulted in over 2,000 responses and 275 new ideas/project concepts. These were narrowed to a set of 16 preliminary alternatives and further screened on the basis of whether and how each alternative would:

1. Serve BOS travel patterns and relieve projected Metrorail passenger crowding
2. Help attain the four identified goals
3. Serve areas with projected population and employment densities suitable for Metrorail service
4. Align with stakeholder and public comments and expressed preferences

Only alternatives that passed all four screening criteria were advanced, resulting in the six alternatives described below.

The Current Alternatives

The six alternatives vary significantly in terms of cost, benefits, and potential impacts. They include a No-Build Scenario, a Lower Capital Cost Alternative, and four Metrorail realignments/extensions.

The No-Build Scenario: Includes the transportation investments already planned and funded, as listed in the Visualize 2045 Regional Long-Range Transportation Plan and Metro's FY 2021-2026 Capital Improvement Program (CIP). It includes the existing rail and bus network plus Silver Line Phase 2, the Potomac Yard Station, and all of the SOGR and modernization projects included in Metro's CIP. It also includes jurisdictional projects such as the State of Maryland's Purple Line light rail and various bus rapid transit (BRT) lines.

The Lower Capital Cost Alternative: Includes a network of enhanced commuter and BRT service, dynamic rail scheduling, exploring options to increase passenger capacity in railcars, expanding capacity in several core stations, and building infrastructure at West Falls Church and the D&G Junction that can support train turnbacks. The enhanced bus network was designed to reduce crowding on the BOS rail lines. It could do so by providing adequate capacity for the number of peak-hour customers that would need to be diverted from the BOS lines, and by offering an attractive option through direct, prioritized bus service. This alternative would create no new rail capacity.

Blue Line to Greenbelt: This alternative would realign the existing Blue Line from the Arlington Cemetery Station to a new, second Rosslyn station, which would offer a direct pedestrian connection to the existing Rosslyn Station. From there it would run through a new, separate tunnel into Georgetown, along M Street, through the District's downtown to Union Station, then northeast through Ivy City, Port Towns, Hyattsville, and College Park to Greenbelt. It would operate on separate tracks from the existing Green and Yellow lines in order to avoid re-interlining. This alternative would create net new rail capacity of 16 trains per hour (TPH) per direction.

Blue Line to National Harbor: This alternative would also realign the existing Blue Line from Arlington Cemetery Station to a new second Rosslyn station, continuing through Georgetown and along M Street to Union Station. From Union Station it would turn south, providing new north-south service in Waterfront and Navy Yard and creating new rail access in areas targeted for development, such as Buzzard Point, St. Elizabeths, and National Harbor, before crossing over the Woodrow Wilson Bridge to Alexandria. This alternative would create net new rail capacity of 16 TPH per direction.

Silver Line Express in Northern Virginia: This alternative would create a separate tunnel and tracks for the Silver Line, starting at West Falls Church Station. From WFC to a new second Rosslyn station, the new tunnel could support express service, local service, or a mix of express and local service. From the second Rosslyn station, the Silver Line would travel through Georgetown along M Street to Union Station, then through Ivy City, Port Towns, Hyattsville, and College Park to Greenbelt. This alternative would create net new rail capacity of 26 TPH per direction.

Silver Line to New Carrollton: This alternative would separate the Silver Line from the Orange Line at Clarendon Station, creating a new connection at a second Rosslyn station before continuing through Georgetown to Union Station. From Union Station, the new tunnel would turn north and east to serve Ivy City and Port Towns, then run along the Annapolis Road/MD 450 corridor to New Carrollton Station. This alternative would create net new rail capacity of 16 TPH per direction.

Evaluating the Alternatives

The six alternatives were evaluated in terms of costs, benefits, and their relative performance in meeting the four goals. This performance assessment was designed according to FTA guidance on the methodology for alternatives analyses.

The performance assessment and cost-benefit analysis (CBA) for all these alternatives is based on a 20-year planning horizon (2040). The rail service assumptions for 2040 follow the findings of the Metrorail Fleet Management Plan of six-minute peak headways, 100% eight-car trains, and systemwide capacity constraint of 26 TPH per direction in 2040. This is a conservative assumption in terms of assessing the need for new capacity, as it estimates ridership and passenger crowding under maximum utilization of the existing system. For the No-Build Scenario, this results in a corridor service plan of six-minute headways on the Orange and Silver lines and 12-minute headways on the Blue Line (10-11 TPH OR/SV, 5 TPH BL).

The CBA has three components:

1. Performance Assessment: Each alternative was scored on its performance across over 14 metrics, each directly related to the study goals and objectives. The alternatives were scored against future conditions as defined by the No-Build Scenario.
2. Benefits Score: The sum of the performance scores.
3. Cost-Effectiveness Score: Results from dividing the benefits score by the total annualized cost for each alternative.

The benefits score and the cost-effectiveness score were comparatively ranked from high to low, indicating how well each alternative performed relative to the others and to the No-Build Scenario. This ranking indicates the scale of positive impacts and changes each alternative would deliver compared to each other and the base-case future (benefits rank) and relative value each alternative provides for the dollars spent (cost-effectiveness rank). A high-level summary of the CBA is presented below along with some selected metrics.

BOS Study CBA Results – Performance Rankings		
Alternative	Benefits Rank	Cost-Effectiveness Rank
Blue Line to National Harbor	Highest	Medium-High
Silver Line Express in Virginia	Medium-High	Lowest
Silver Line to New Carrollton	Medium	Medium-Low
Blue Line to Greenbelt	Medium-Low	Medium
Lower Capital Cost	Lowest	Highest

BOS Study CBA Results – Selected Metrics				
Alternative	New weekday trips	New annual fare revenue	Construction cost estimate	Annual O&M cost
Blue Line to National Harbor	180,000	$154.2 M	$20-25B	$175-200 M
Silver Line Express in Virginia	139,000	$119.4 M	$20-25 B	$150-175 M
Silver Line to New Carrollton	94,000	$80.4 M	$15-20 B	$100-125 M
Blue Line to Greenbelt	92,000	$79.1 M	$15-20B	$100-125 M
Lower Capital Cost Alt	16,000	$33.9 M	$0-5 B	$75-100 M

Summary of CBA Results

As evaluated, the new Blue Line to National Harbor would deliver the highest level of benefits relative to the other options. When cost is factored in, it performs second-best. It scores well because it provides new throughput capacity across the Potomac, would include new rail stations in areas targeted for growth and development, has the greatest impact in terms of expanding access to jobs and high-capacity transit in Equity Emphasis Areas, and creates new north-south to east-west transfer opportunities.

The Lower Capital Cost Alternative (LCC) scored lowest in terms of benefits, but highest in terms of cost-effectiveness. This is to be expected given its significantly lower construction costs relative to the rail alternatives. However, for this alternative to actually meet the four established goals and the purpose of the LPA, over 3,000 peak-hour Metrorail riders would need to voluntarily shift from rail to bus; a substantial jurisdictional investment in bus priority would be needed, such as dedicated lanes and traffic signal priority; and adequate bus circulation and layover space would be needed in the District's downtown.

Next Steps

Following this briefing, meetings will be scheduled to brief elected officials on the current status and gather feedback on the alternatives. Additional stakeholder and public engagement will follow to gather input on the CBA results and feedback on the proposed alternatives. This information will support the Board's consideration and selection of an LPA.

FUNDING IMPACT:

There is no funding impact from providing this information item.

TIMELINE:

Previous Actions	April 2019 – Notice of Study
Anticipated actions after presentation	Fall 2021 – Briefings to elected officials and boards. Public engagement activities and additional stakeholder meetings Winter 2022 – Board selection of BOS corridor LPA

RECOMMENDATION:

Blue/Orange/Silver Corridor Capacity & Reliability Study

Status Update

Finance and Capital Committee
September 9, 2021

Agenda

- Blue/Orange/Silver Corridor Capacity and Reliability Study (BOS Study) update
- Study purpose
- BOS corridor transit challenges
- Identifying range of alternatives
- Descriptions of current alternatives
- Next steps

BOS Study Area

Study Purpose

- Launched early 2019 to identify best and most cost-effective solutions to address:
  - Ridership
  - Capacity
  - Service
  - Reliability needs
- Identifies range of options to address corridor-wide concerns
- Study now ready for additional public engagement and input

Solution to Address BOS Transit Challenges

Reliability and on-time performance

Managing construction and disruptions

Cost of inflexible services

Sustainability and equity

Goal 1:
Provide Sufficient Capacity to Serve Ridership Demand

Goal 2:
Improve Reliability & On-Time Performance

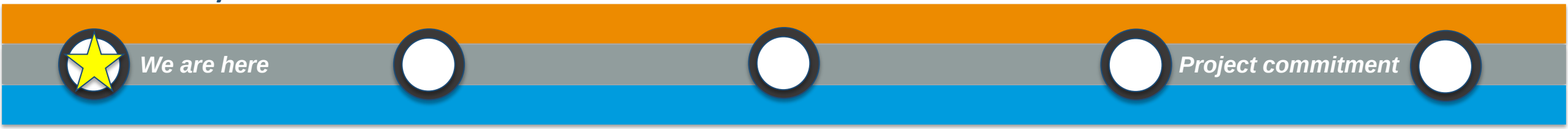
Goal 3:
Improve Operational Flexibility & Cost-Efficiency

Goal 4:
Support Sustainable Development & Expand Access to Opportunity

Study Aligns with Federal Project Planning Requirements

- Major capital projects can take 20+ years to deliver (e.g., Silver Line expansion)
- Following federal requirements to be eligible for Federal funding
- No commitment to build until funding agreement

Review BOS Study Presentation



BOS Study, Select LPA

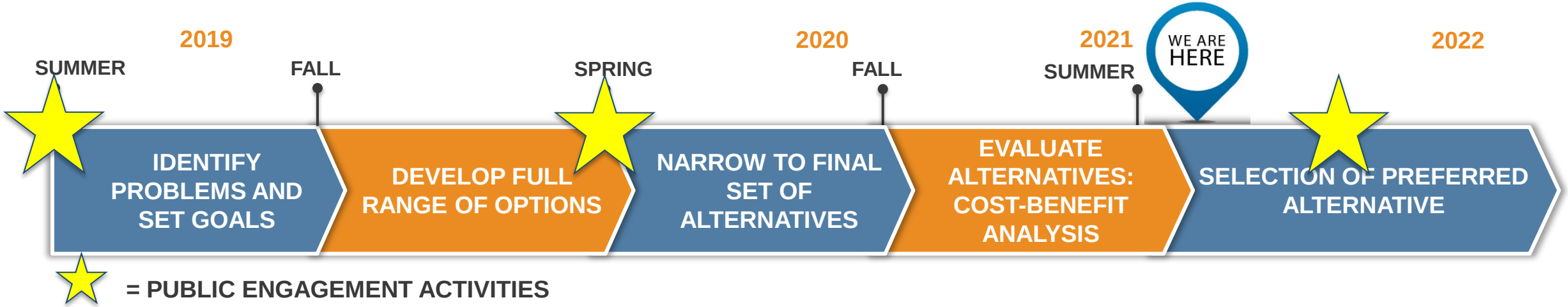
NEPA/Project Development ~2-5+ years

Engineering Phase 5-10 years

Funding Agreement

Design, build ~5-10+ years

Study & Selection Process

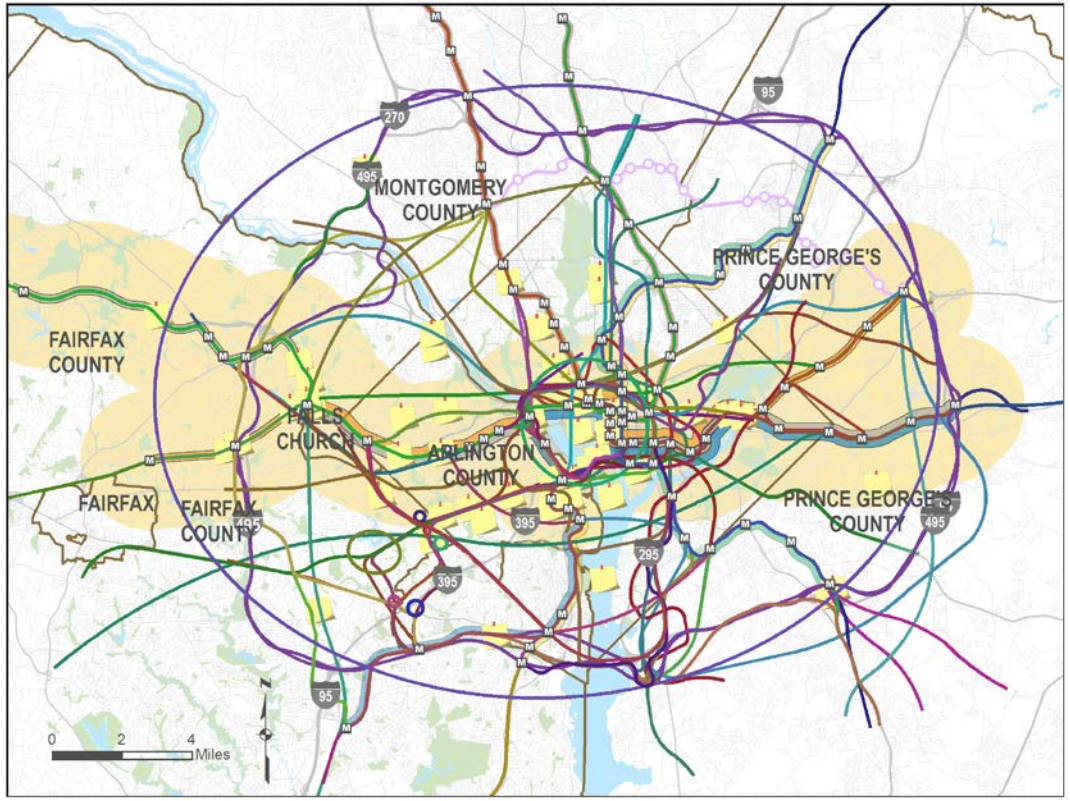


- Process based on Federal guidelines for NEPA alternatives analysis
- Continued engagement with customers, public, stakeholders, and elected officials

Public & Stakeholder Input to Date

- Metro leadership and technical advisory committees
- Jurisdictional leadership and technical advisory committees

Over 275 Ideas Submitted



Identifying the Locally-Preferred Alternative

- **Six preliminary alternatives developed:**
  - Solution may be one of the six alternatives shown, or a combination of components from different alternatives
  - Recommendation to be made following public participation process and engagement with stakeholders and elected officials
  - **Presentation is not an LPA recommendation**

Range of Alternatives

No Build

- Today's Services
- State of Good Repair
- Silver Line Phase 2
- Potomac Yard
- Funded Jurisdictional Projects (e.g., Purple Line)

Lower Capital Cost Alternative

- Enhanced bus service
- Dynamic rail scheduling
- Railcar capacity
- Rail turnbacks
- Core station expansions

Highest costs/ benefits

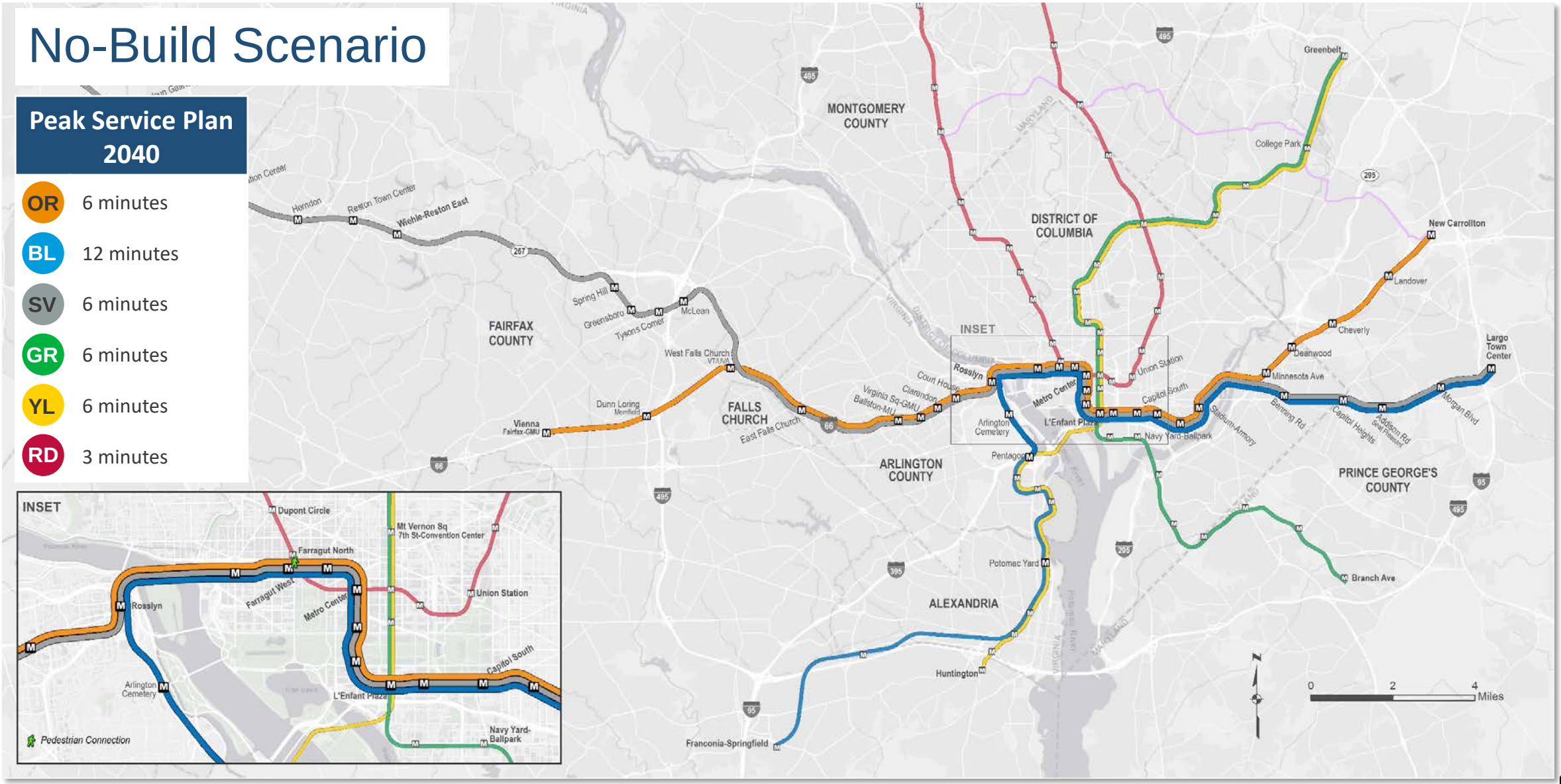
New Metrorail Lines

- 4 potential corridors
- New rail lines
- New rail stations
- Expanded capacity
- Expanded rail access

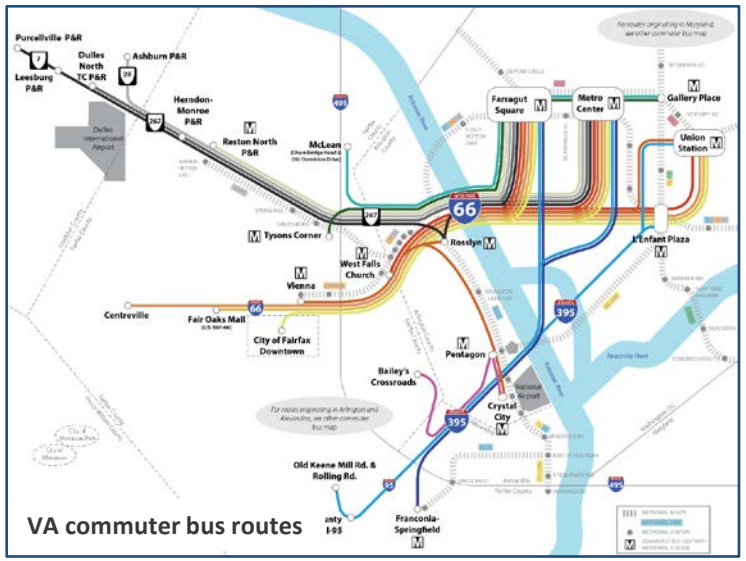
No-Build Scenario

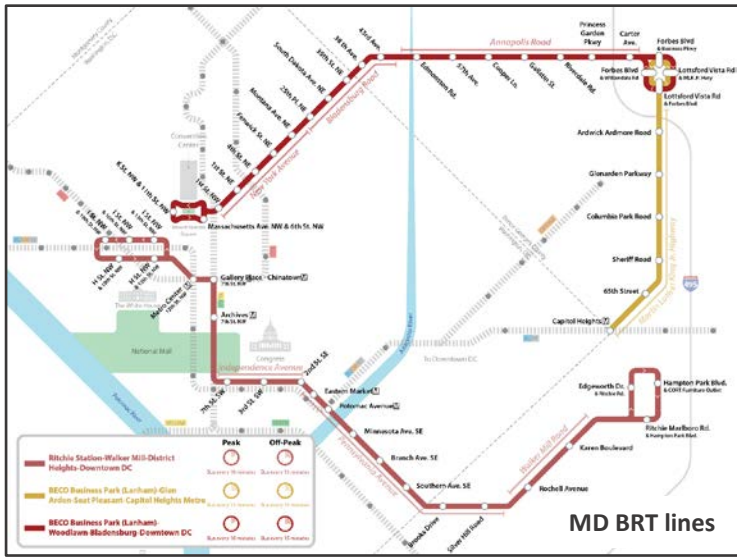
Peak Service Plan 2040

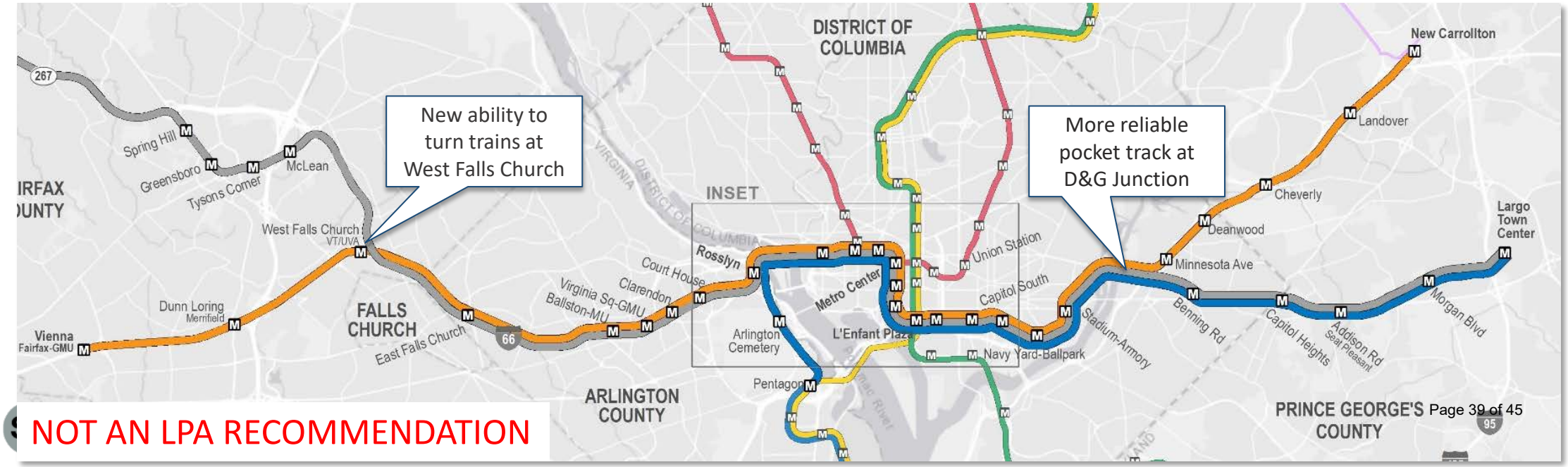
OR	6 minutes
BL	12 minutes
SV	6 minutes
GR	6 minutes
YL	6 minutes
RD	3 minutes



Lower Capital Cost Alternative

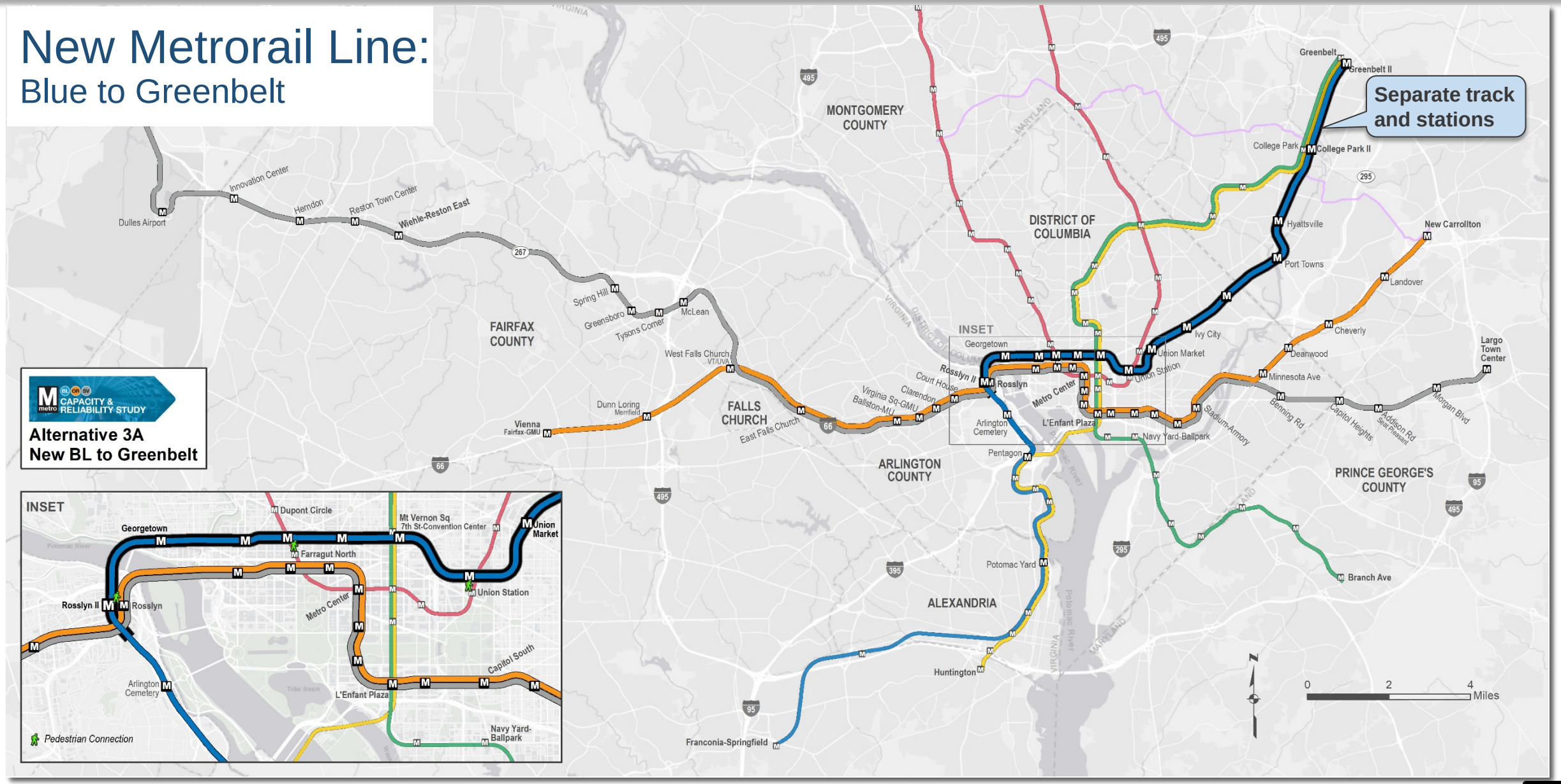




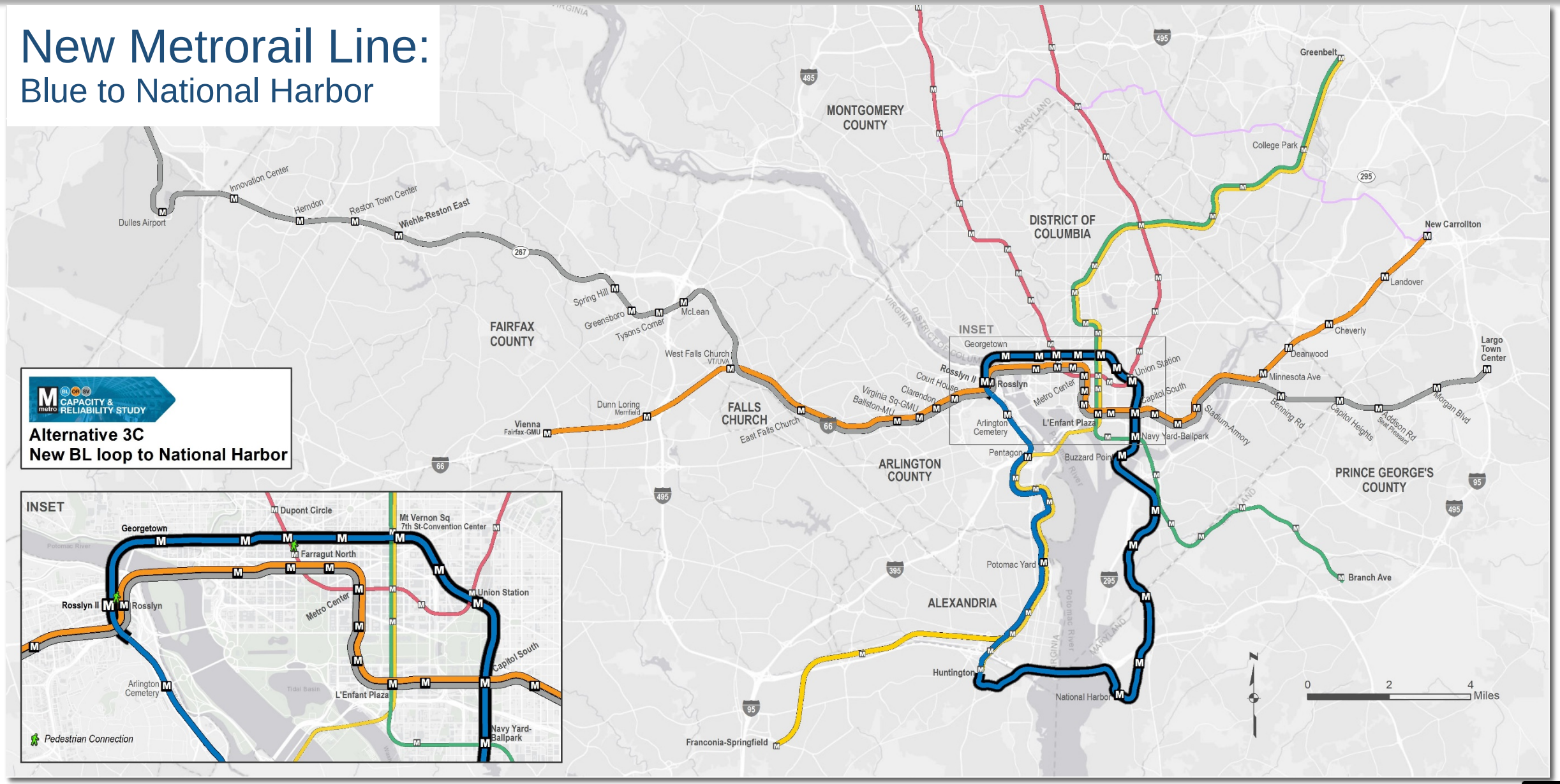


NOT AN LPA RECOMMENDATION

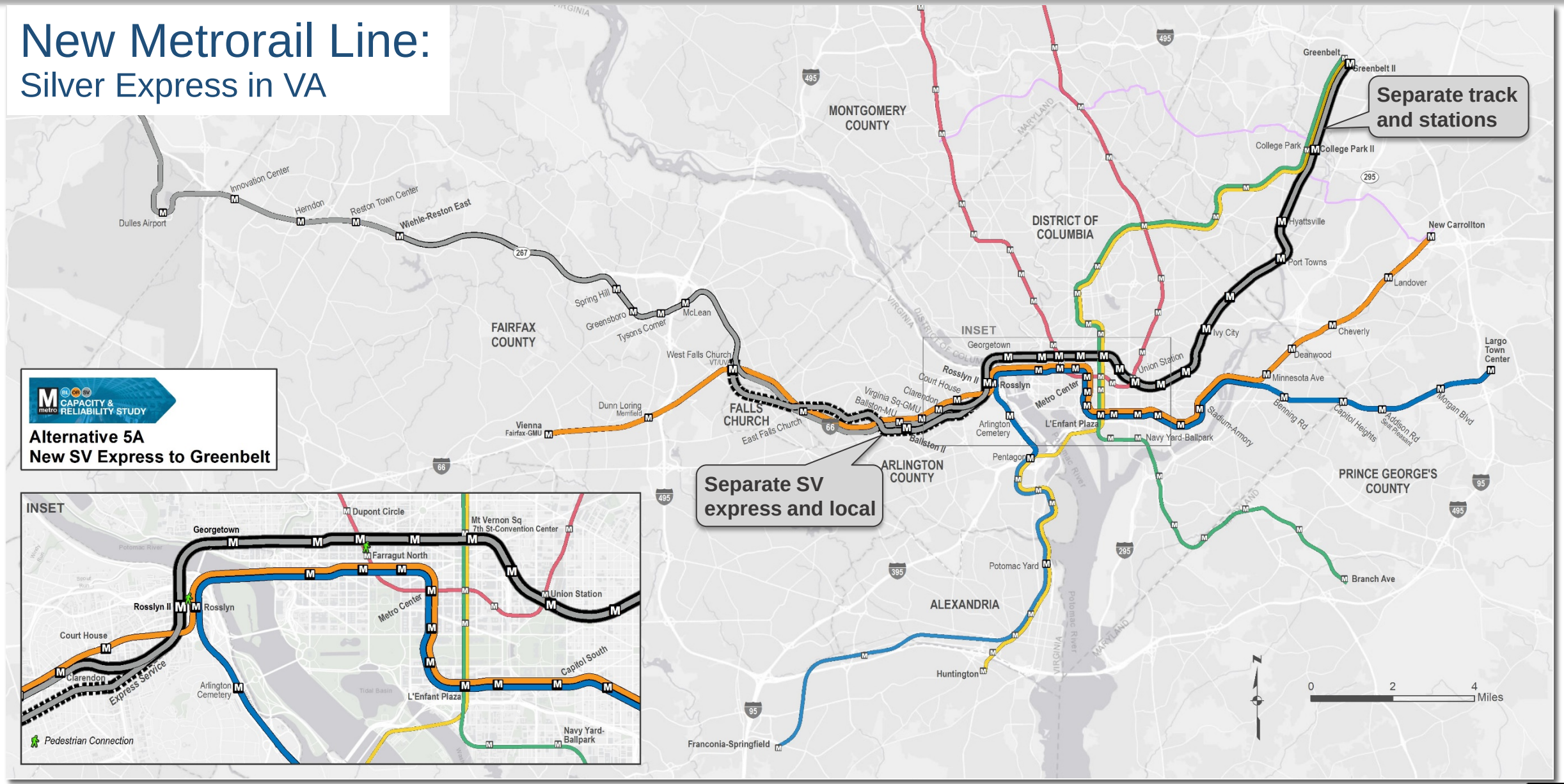
New Metrorail Line:
Blue to Greenbelt



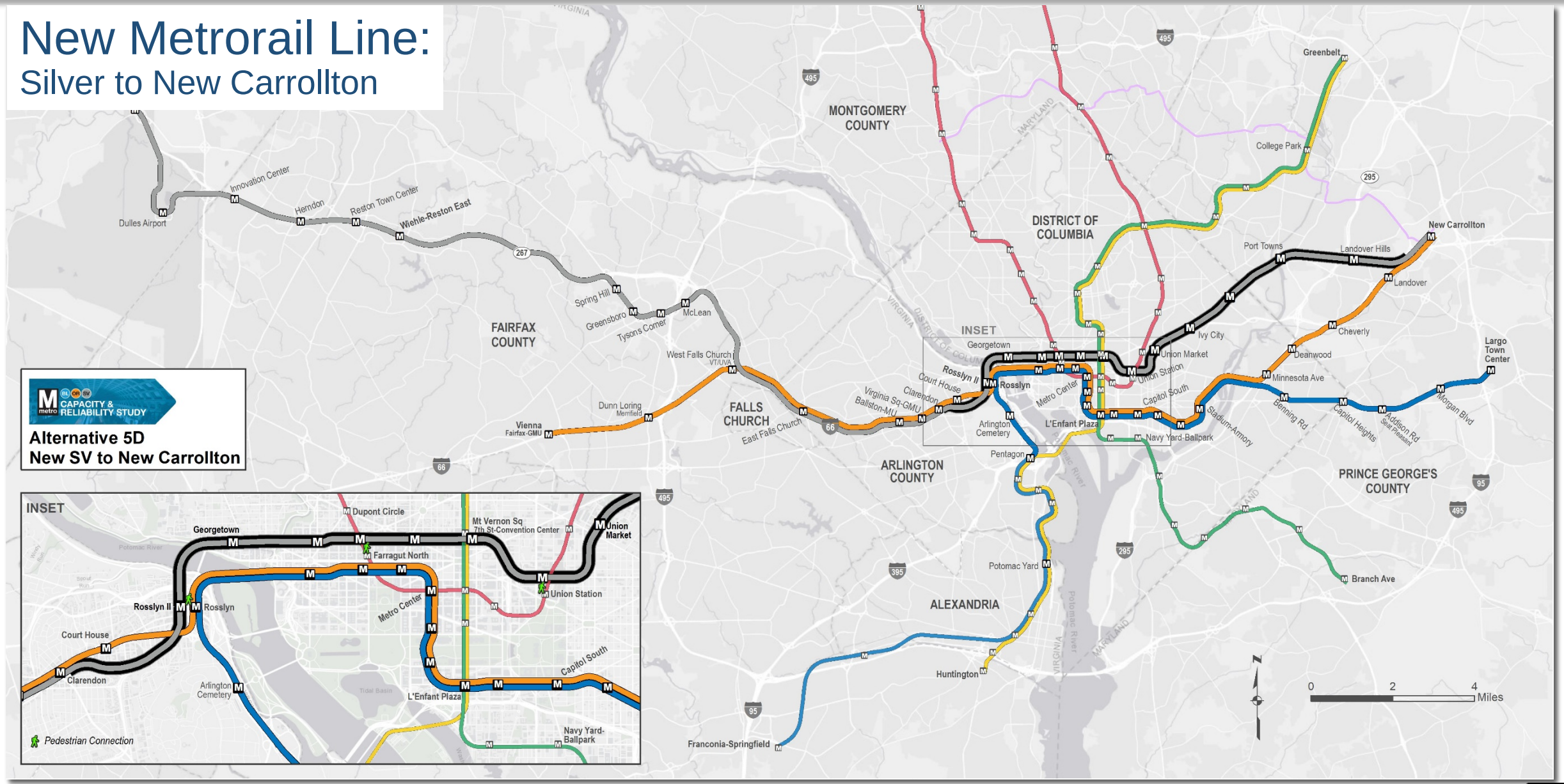
New Metrorail Line:
Blue to National Harbor



New Metrorail Line:
Silver Express in VA



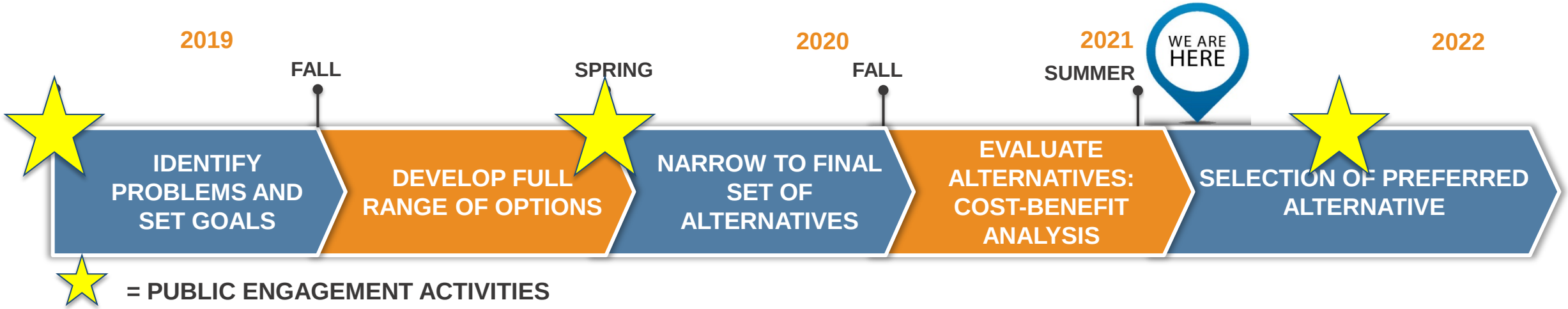
New Metrorail Line:
Silver to New Carrollton



Results of Cost-Benefit Analysis

Selected Metrics				
Alternative	New weekday trips	New annual fare revenue ($M)	Capital cost ($B)	Annual O&M cost ($M)
Blue Line to Natl. Harbor	180K	$154.2	$20-25	$175-200
Silver Line Express in VA	139K	$119.4	$20-25	$150-175
Silver Line to New Carrollton	94K	$80.4	$15-20	$100-125
Blue Line to Greenbelt	92K	$79.1	$15-20	$100-125
Lower Capital Cost	16K	$33.9	$0-5	$75-100

Next Steps



- Briefings to elected officials and boards – Fall 2021 (tentative)
- Third round of public engagement – Fall 2021 (tentative)
- Board selection of solution – 2022 (tentative)

City of Alexandria, Virginia

MEMORANDUM

DATE: NOVEMBER 17, 2021

TO: MEMBERS OF THE TRANSPORTATION COMMISSION

FROM: HILLARY ORR, DEPUTY DIRECTOR, TRANSPORTATION

SUBJECT: AGENDA ITEM #5 – COMPLETE STREETS REPAVING FEEDBACK FORM

ISSUE: Consideration of a streamlining Complete Streets improvements by eliminating the annual repaving feedback form.

RECOMMENDATION: That the Commission review and endorse staff's recommended approach to coordinating Complete Streets improvements with street resurfacing.

BACKGROUND: In 2011, the Alexandria City Council adopted the Complete Streets Policy, which tasked the Department of Transportation & Environmental Services to identify and implement projects that improve safety and convenience for all road users as part of routine street maintenance wherever possible. (Attachment 1)

Since the adoption of the Complete Streets Policy, staff has worked to phase in Complete Streets improvements when streets are resurfaced. The most common types of improvements are new or upgraded crosswalks, curb ramps, and bicycle shared-lane markings. These improvements are typically done quickly and with minimal design or public outreach due to the straightforward and non-controversial nature of the improvements. On occasion, staff has identified more complex treatments to be implemented through repaving, such as road diets and geometric improvements.

In 2018, the City began issuing an annual Citywide feedback form for residents to provide input on streets that are being resurfaced. Feedback is usually collected for non-local streets where striping improvements are potentially feasible. Staff analyzes all public comments and produces a report for each street to summarize resident feedback. (Attachment 2)

DISCUSSION: Over the past several years, staff has identified challenges and opportunities for improvement in coordinating Complete Streets improvements with street resurfacing. Based on this experience, staff have developed two primary findings and recommendations, discussed in more detail below:

Citywide Repaving Feedback Form – staff resources for limited benefit

Every year, staff develops a repaving feedback form to solicit community input on streets that are

scheduled to be repaved in the coming paving season, accompanied by an eNews release, webpage updates, and social media engagement. Staff receives hundreds of community comments related to repaving each year, which are then analyzed and summarized in a report for each street. (Attachment 2) The intention is that this feedback would then be used to inform potential changes to those streets via repaving. The original of this effort was to garner feedback to improve service delivery. However, staff has identified several problems:

- Much of the community feedback is related to issues beyond the scope street resurfacing
- This results in wasted staff effort and a potential erosion of trust between City staff and residents
- Much feedback does not end up getting used
- The repaving form sometimes creates speculation about what the City is planning to do to streets that are repaved, which can increase tensions in the community
- This approach fails to set accurate or reasonable expectations

Coordinating Complex Projects with Street Resurfacing

Street resurfacing provides an opportunity to phase in mobility, access, and safety improvements, particularly street marking improvements. In some instances, staff have coordinated more complex improvements, such as road diets or geometric improvements, such as King Street, North Van Dorn Street, Seminary Road, and Commonwealth Avenue. While these have been successful projects, coordinating more complex improvements with street resurfacing is extremely challenging for the following reasons:

- Staff must condense what would usually be a year or more of community outreach, design, traffic analysis, procurement, and approvals into just eight months or less to make the resurfacing deadline
- Staff must adopt an "all hands on deck" approach which pulls resources away from other priority projects
- Project components must be rushed, risking quality issues
- Street repaving must be rescheduled, resulting in deferred maintenance and resident frustration

Staff have attempted to mitigate these challenges by planning further ahead in the resurfacing schedule to give ample time for all the necessary project components. However, the resurfacing schedule is volatile and can change based on funding requirements, project conflicts, and utility coordination. Streets can either be removed or advanced on the paving schedule, creating uncertainty regarding what the Complete Streets Program can accomplish in any given year.

Moreover, the paving schedule often drives the Complete Streets annual work plan, which may or may not align with established priorities. Additionally, repaving projects typically establish the project limits, which may not always coincide with the limits for planned Complete Streets projects.

Recommendations:

1. Staff recommends ceasing the Citywide repaving feedback form. Staff would continue to

coordinate standard Complete Streets upgrades with repaving in accordance with the Complete Streets Policy. Outreach would continue to be conducted with affected neighborhoods as appropriate for more substantial changes or larger street design projects.

2. Staff recommends a more proactive approach to implementing priority projects versus being reactive to the paving schedule. While continuing to complete basic Complete Streets upgrades with street resurfacing, the program would focus on implementing the City's adopted plans by planning more complex priority improvements outside of the resurfacing schedule.
3. Staff recommends the development of a five-year work plan for Complete Streets with input from the Transportation Commission. This approach would generate clear expectations for residents, City Council, City boards and commissions, and staff for what Complete Streets improvements will be done. Staff anticipates this work plan would be developed in Fiscal Year 2023 and would consider crash data and equity to support and align with Vision Zero efforts.

ATTACHMENTS:
Attachment 1: Complete Streets Policy
Attachment 2: Example of a Repaving Feedback Summary

Attachment 1: Complete Streets Policy

RESOLUTION. 2621

WHEREAS, the term "Complete Streets" describes a comprehensive, integrated transportation network with infrastructure and design that allows safe and convenient travel along and across streets for *all* users, including pedestrians, bicyclists, riders and drivers of public transportation, as well as drivers of other motor-vehicles (i.e., cars, trucks, vans, motorcycles, SUVs, etc.), and people of all ages and abilities, including children, older adults, and individuals with disabilities; and

WHEREAS, streets that are not designed to provide safe transport for *all* users present a danger to pedestrians, bicyclists, and riders of public transportation, most especially children, older adults, and people with disabilities; many of whose traffic-related injuries and fatalities are preventable, and the severity of whose traffic-related injuries could readily be decreased by implementing Complete Streets approaches; and

WHEREAS, the Council wishes to encourage walking, bicycling, and the use of public transportation as safe, convenient, environmentally friendly, and economical modes of transportation that promote health and independence for *all* people; and

WHEREAS, Complete Streets are essential in providing safe routes to school for children; and

WHEREAS, the Council recognizes that the careful planning and coordinated development of Complete Streets infrastructure offers long-term cost savings for local and state government, benefits public health, and provides financial benefits to property owners, businesses, and investors, while creating a safe, convenient, integrated transportation network appropriate for the land use or the context of the street for *all* users; and

WHEREAS, sedentary lifestyles and limited opportunities to integrate exercise into daily activities are factors contributing to increased obesity among adults and children and numerous correlated adverse health consequences; and

WHEREAS, streets are a key public space, shape the experience of residents and visitors to the City of Alexandria, directly affect public health and welfare, and provide the framework for current and future development; and

WHEREAS, the one-third of Americans who do not drive include a disproportionate number of older adults, low-income people, people of color, people with disabilities, and children, and the inequitable distribution of safe alternative means of travel adversely affects their daily lives; and

WHEREAS, the dramatic increase in the population of older and very old adults that will be seen by 2020 and 2030, requires that changes be made now to street design and transportation planning; and

WHEREAS, the Council wishes to build upon the City's existing policies that recognize the importance of addressing the transportation needs of pedestrians, bicyclists, and public transportation riders, such as the Transportation Master Plan, Eco City Action Plan, 2010 Strategic Plan, the Pedestrian and Bicycle Mobility Plan, and several small area plans; and

WHEREAS, the Council wishes to encourage public participation in community decisions concerning street design, and would provide opportunities for public input in the development of future street design guidelines and would incorporate public comments into a final document; and

WHEREAS, the Council recognizes the importance of Complete Streets infrastructure and modifications that enable safe, convenient, and comfortable travel for all users, such as sidewalks; shared use paths; bicycle lanes; automobile lanes; paved shoulders; street trees and landscaping; planting strips; curbs; accessible curb ramps; bulbouts; crosswalks; refuge islands; pedestrian and traffic signals, including countdown and accessible signals; signage; street furniture; bicycle parking facilities; public transportation stops and facilities; transit priority signalization; narrow vehicle lanes; raised medians; and dedicated transit lanes, and

those features identified in the Transportation Master Plan; and

WHEREAS, the Council desires that its streets form a comprehensive and integrated transportation network promoting safe, equitable, and convenient travel for all users while preserving flexibility, recognizing community context, and using the latest and best guidelines and standards.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ALEXANDRIA, VIRGINIA:

1. That the Department of Transportation and Environmental Services shall make Complete Streets practices a routine part of everyday operations, shall use transportation programs and projects identified in Small Area Plans, development cases, and City maintenance and Capital Projects, to improve the transportation network for all users and shall work in coordination with other departments, agencies, and jurisdictions to achieve Complete Streets to the maximum extent possible throughout the City. To accomplish this, the Department of Transportation and Environmental Services shall develop a Complete Streets checklist based on all the City's multi-modal planning and policy documents to ensure that a Complete Streets review is conducted for all development and for City roadway projects.

2. That every street project shall incorporate to the extent possible Complete Streets infrastructure sufficient to enable reasonably safe travel along and across the right-of-way for each categories of users; provided, however, that such infrastructure may be excluded upon written approval, to be documented and reported, by the Director of the Department of Transportation and Environmental Services, when documentation and data indicate that:
    a. Use by non-motorized users is prohibited by law
    b. The cost would be excessively disproportionate to the need or probable future use
    c. There is an absence of current or future need; or
    d. Inclusion of such infrastructure would be contrary to public safety or would be unreasonable or inappropriate in light of the scope of the project.

    That, as appropriate, the Director of the Department of Transportation and Environmental Services shall review capital and maintenance projects to ensure the integration, accommodation, and balance of the needs of all users are considered in all transportation projects.

    That, as appropriate, the Director of the Department of Transportation and Environmental Services and the Director of Planning and Zoning shall review all Small Area Plans and development cases to ensure the integration, accommodation, and balance of the needs of all users are considered. They shall also ensure that all Small Area Plan and development case staff reports discuss how each plan and/or development case is consistent with the Complete Streets Resolution.

    The staff reports for the Small Area Plans and the development cases shall also document where the Director of the Department of Transportation and Environmental Services and the Director of Planning and Zoning exercised discretion in applying the Complete Streets Resolution with supporting data that indicates the basis for the decision. A report listing instances of discretion will be provided to the Transportation Commission and the Traffic and Parking Board every two years.

3. That, as feasible, the City of Alexandria shall incorporate Complete Streets infrastructure into existing public streets to improve the safety and convenience of users and construct and enhance the transportation network for all users while undertaking an appropriate evaluation process and minimizing negative impacts to adjacent neighborhoods.

4. That, if the safety and convenience of users can be improved within the scope of pavement resurfacing, restriping, or signalization operations, such projects shall implement Complete Streets infrastructure to increase safety for users.

5. That, as feasible, the City of Alexandria will conduct trainings on Complete Streets best practices for personnel responsible for the design, construction, and maintenance of streets and will coordinate with these other departments, including the Alexandria Police

Department and Alexandria Fire Department, during project development.

6. That the Director of Transportation and Environmental Services shall, upon request, provide indicator data as referenced in the Alexandria City Council Strategic Plan to report on the City's progress toward meeting strategic goals for users to travel in safety and comfort on foot, by bicycle, and using public transportation.

7. That the Director of Transportation and Environmental Services shall report to the Transportation Commission and Traffic and Parking Board in a public forum every two years regarding the steps taken to implement this resolution, all instances where the Director of Transportation and Environmental Services exercised discretion, and the Director of Planning Zoning exercised discretion for Small Area Plans and development cases, and actions that would need to be taken by these commissions and boards or ~~the Transportation Commission~~ or other agencies or departments to implement this resolution.

8. **WHEREAS,** the Complete Streets Program has been successful in fulfilling the goals of the City Council Strategic Plan, the Transportation Master Plan and Eco-City Alexandria, by implementing infrastructure that provides safe, convenient and comfortable travel for all roadway users, it is thereby ~~repealed~~.

Adopted: May 17, 2014

WILLIAM D. EUILLE MAYOR

ATTEST:

Jacqueline M. Henderson, MMC City Clerk

Attachment 2: Example of Repaving Feedback Form

COMMONWEALTH AVENUE REPAVING SURVEY

OVERVIEW

In preparation for the upcoming repaving project on Commonwealth Avenue from East Braddock Road to King Street, the City of Alexandria Transportation & Environmental Services Department issued a survey to gather community input on potential improvements to the roadway. The survey was open from March 6 to April 5, 2019, during which 141 responses were received. The feedback is summarized below.

RESPONDENT CONCERNS

The chart below depicts the concerns that survey respondents identified on the street.

"OTHER" Concerns

Survey respondents were able to select "other" as an option and provide narrative comments on their concerns with the street. The following summary is not intended to capture how many residents referenced a specific issue, but rather is intended to catalog the range of different concerns on the street, some of which may even conflict with one another. Comments regarding other locations in Alexandria were excluded from this summary.

- Safety concerns at Commonwealth and Oak Street intersection
- People driving use bike lanes to get around traffic
- People walking and biking don't obeying traffic laws
- Speed bumps are too high
- Bike lanes end abruptly with no warning
- Cut through traffic
- Traffic queuing from King Street intersection

- Too many restrictions on drivers
- Bike lanes are too close to door zone of parked cars
- Not enough signage or lighting at crosswalks
- Potholes
- Limited on-street parking
- Insufficient pedestrian safety infrastructure
- Missing sidewalk
- Intersection of Commonwealth and King Street is challenging
- People driving blocking bike lanes and crosswalks
- Limited visibility from side streets due to foliage and on-street parking
- People driving swerve around speed bumps

DESIRED CHANGES TO THE STREET

Respondents were also asked to identify changes that they would like to see on the street. The chart below depicts the results from this survey question.

"Other" Desired Changes

Respondents were also asked to identify changes that they would like to see on the street. The chart below depicts the results from this survey question. The following summary is not intended to capture how many residents referenced a specific issue, but rather is intended to catalog the range of different ideas about the street, some of which may even conflict with one another. Comments regarding other locations in Alexandria were excluded from this summary.

Intersections

- Improve visibility at intersections by restricting on-street parking and/or trimming vegetation
- Traffic signal or traffic calming at Commonwealth and Oak Street
- Traffic calming at Commonwealth and Oak Street (e.g. speed feedback signs)
- Install traffic signal at Commonwealth and Cameron Street
- Install more four-way stops

Pedestrian Issues

- Make crosswalks more prominent with markings, signage, etc.
- Flashing pedestrian lights to improve crossing safety
- Improve lighting at crosswalks, particularly at Oak Street and Sunset Drive
- Extend medians to provide pedestrian refuge islands
- Install new crosswalks where they don't exist currently

Bicyclist Issues

- Continue bike lane to King Street Metro
- Remove on-street parking or move bike lane out of the "door zone" of parked cars
- Switch the bike lane with the parking lane so people biking have protection from moving vehicles

Speeding & Traffic

- Use consistent design for speed cushions
- Make speed bumps more tapered
- Implement other traffic calming measures besides speed cushions
- Remove speed cushion gaps
- Remove speed cushions
- Traffic calming on side streets to reduce cut-through traffic
- Traffic calming for children's safety
- Repair speed cushions and improve their visibility
- Reduce residential speed limit to 20 mph
- Reduce cut-through traffic
- Reduce PM peak hour traffic
- Make side streets one-way

Other/General

- More police enforcement
- Education on traffic laws
- Clearer roadway signs
- Fix potholes
- More regular roadway maintenance
- Implement parking restrictions for non-residents near Metro station
- Remove all on-street parking

ADDITIONAL RESIDENT COMMENTS

Survey respondents were able to submit additional narrative comments. These comments are summarized below.

Intersections

- Reduce delays at King Street intersection
- A stop sign at Commonwealth & Oak is desired
- Improved visibility at intersections is desired
- Crossing guards are helpful for managing vehicle and pedestrian traffic at Commonwealth and Oak Street, but more improvements are desired to make this intersection feel safe throughout the day
- Pedestrian and bicyclist safety is a concern at Commonwealth and Braddock Road

Pedestrian Issues

- A speed table between King Street Metro and Sunset Drive is desired to improve safety for people crossing
- Flashing lights for pedestrian crossings are desired throughout the corridor
- Commonwealth Avenue is difficult to cross, especially for children and parents. Specific intersections that were noted include:
  - Sunset Drive
  - Oak Street
  - Walnut Street
  - Chapman Street
  - Braddock Road
- Improved lighting and signage is desired at crosswalks
- Expand existing sidewalks
- Pedestrian safety is a concern in general, but especially for students walking to school
- Additional lighting, crosswalk, and/or traffic signs/signal at Commonwealth and Oak Street is desired for pedestrian safety
- Intersection bulb-outs are desired to shorten crossing distance for pedestrians
- Sidewalks and curb ramps need to be improved for those with temporary or permanent disabilities

Bicyclist Issues

- Extend bike lanes on both sides of Commonwealth
- Increase safety for bicyclists merging when the bike lane ends
- Physical protection is desired for bike lanes, perhaps by switching the bike lanes with the parking lanes
- Adjust bike lanes so they are not in the "door" zone of parked vehicles
- Increase bike signage to reinforce right to ride on the roadway
- People driving swerve into the bike or parking lane to avoid speed cushions
- Commonwealth is one of the easiest streets in the City to travel by bike

Speeding & Traffic

- Turn restrictions are desired to reduce cut-through traffic on Cedar Street
- Repair/replace speed cushions to be more effective
- Reduce turning radius at Commonwealth and Walnut Street to slow turning drivers
- Speed cameras are desired
- Reduce cut-through traffic on Linden Street
- Traffic bottlenecks in this area
- Remove speed cushions
- Traffic calming throughout the corridor
- Congestion is a concern during the PM peak hour
- Existing speed cushions are difficult to traverse for people driving and biking
- Converting side streets to one-way traffic is desired
- 25 mph is too high for neighborhood streets

Other/General

- Reduce complexity of roadway
- Increase visibility and clarity of roadway markings and signage
- Make more improvements for people driving
- People walking and biking do not understand traffic laws
- Pavement condition is poor
- More enforcement is desired
- Commonwealth is a wide street and could accommodate better bike lanes, sidewalks, or a street car

City of Alexandria, Virginia

MEMORANDUM

DATE: NOVEMBER 17, 2021

TO: MEMBERS OF THE TRANSPORTATION COMMISSION

FROM: HILLARY ORR, DEPUTY DIRECTOR, T&ES

SUBJECT: AGENDA ITEM #6 – FY28-29 CONGESTION MITIGATION AND AIR QUALITY (CMAQ) AND REGIONAL SURFACE TRANSPORTATION PROGRAMS (RSTP)

ISSUE: Consideration of the FY28-29 Congestion Mitigation and Air Quality Improvement Program (CMAQ) and Regional Surface Transportation Program (RSTP) project funding requests.

RECOMMENDATION: That the Transportation Commission endorses the FY28-29 CMAQ /RSTP funding request and recommend City Council consideration and approval at the December 2021 Legislative session.

DISCUSSION: Since 1993, the Commonwealth has allocated CMAQ and RSTP funding to the Northern Virginia region. CMAQ funded projects must meet these three eligibility requirements: 1) have a transportation focus, 2) reduce air emissions, and 3) be located in or benefit a nonattainment or maintenance area.

RSTP funds are flexible funds that may be used for a variety of regional transportation activities, including but not limited to pedestrian and bicycle infrastructure, transit capital projects, and transportation / transit studies.

Since the Commonwealth of Virginia provides the local match required for CMAQ/RSTP funds, the City is not required to provide any local funds to receive the grants. As projects mature in the annual CIP, staff provides updated estimates of operating impacts from each of these projects.

The City of Alexandria must submit the FY28-29 CMAQ/RSTP funding request to the Northern Virginia Transportation Authority (NVTA) by December 2021. A combined table showing CMAQ/RSTP funding for FY22-27 as well as the FY28-29 proposed funding can be found in Attachment 1. The City's funding request for Fiscal Year 2028 is $4.5M and includes the following projects.

FY28 CMAQ/RSTP Proposed Program

Project Name	FY28	FY29
Duke Street Transitway Operations (CMAQ)	$3,300,000	$3,750,000
Mt. Vernon Avenue (CMAQ)	$1,000,000	$0
Commuter Assistance (CMAQ)	$200,000	$0
Alexandria Mobility Plan	$0	$750,000
TOTAL	**$4,500,000**	**$4,500,000**

Duke Street Transitway Operations

The City anticipates operations on the Duke Street Transitway to begin around FY27 and will most likely require additional funding for operations (similar to the West End Transitway). The City began the planning process in early 2021 for the transitway, coordinated with some of the City's other projects along the corridor, including transit signal priority and improvements at the intersection of Duke Street at West Taylor Run Parkway. Regardless of the outcome of the planning process, transit enhancements, including additional service, will require these additional operating funds. To date, the City has received a total of $87 million in NVTA 70% funding for design, right-of-way, construction and buses for the Duke Street Transitway project.

Proposed Funding: $7,050,000

Mt. Vernon Avenue

The City has received approximately $1 million in grant funding from the Virginia Department of Transportation to develop and implement designs for mobility, safety, and access improvements on Mount Vernon Avenue between Four Mile Run and Glebe Road. Project design is expected to begin in FY23. Potential improvements include corridor reconfigurations, crossing enhancements, intersection geometry improvements, and traffic signal modifications. Given the complex and costly nature of some of the potential improvements, the City anticipates installing some intersection treatments using temporary or interim materials. Additional funding will be needed to construct the improvements using permanent materials. Staff recommend requesting an additional $1 million in grant funding in FY28 to fully construct the project.

Proposed Funding: $1,000,000

Commuter Assistance

The City currently operates the GO Alex Mobile Store to provide commuter outreach services at different locations across the City, including Metro Stations. This service provides customers with information about transportation options within and around the City. It also provides a location to purchase various transit fares. The City anticipates continuing some form of mobile commuter outreach in FY28 and proposes this funding to continue to support that effort. This service is currently funded through CMAQ.

Proposed Funding: $200,000

Alexandria Mobility Plan

In October 2021, City Council adopted the Alexandria Mobility Plan as an update to the 2008 Transportation Master Plan. The City anticipates an effort to reassess and update the Alexandria Mobility Plan beginning in FY29 to ensure that transportation planning in the City reflects

changes to the region and transportation trends to continue to serve the needs of residents, businesses, and visitors throughout the City.
Proposed Funding: $750,000

ATTACHMENTS:
Attachment 1: FY23-FY27 CMAQ/RSTP Approved and FY28-FY29 Proposed

Attachment 1

CMAQ/RSTP FY22-FY27 Program & FY28-FY29 Proposed											
Project Name		**PRIOR YEAR**	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**	**FY27**	**FY28 Proposed**	**FY29 Proposed**	**PROJECT TOTAL**
West End Transitway Operations	CMAQ	$ -	$ -	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ -	$ -			**$ 3,000,000**
Duke Street Transitway Operations	CMAQ	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,273,000	$ 3,300,000	$ 4,000,000	**$ 10,573,000**
Alexandria Bus Shelters FY 21	RSTP	$ 1,286,753	$ 500,000	$ 400,000	$ -	$ -	$ -	$ -			**$ 2,186,753**
Alexandria NEEP (New Electronic Payment Program)	RSTP	$ 100,000	$ 1,000,000	$ -	$ -	$ -	$ -	$ -			**$ 1,100,000**
Transportation Demand Management	CMAQ	$ 5,119,291	$ 482,902	$ 400,000	500,000	$ 500,000	$ 423,865				**$ 7,426,058**
Alexandria Transit Store (Commuter Outreach)	CMAQ	$ 600,000	$ -	$ -	$ 600,000	$ -	$ -	$ -	$ 200,000		**$ 1,400,000**
Bike Sharing Initiative	CMAQ	$ 752,000	$ 400,000	$ 435,582	$300,600	$ -	$ 350,000	$ -			**$ 2,238,182**
ITS Integration (SMART MOBILITY)	CMAQ	$ 1,276,311	$ 1,000,000	$ 735,189	$ 600,000	$ 2,385,331	$ -	$ -			**$ 5,996,831**
SMART Mobility Implementation			$ -	$ -	$ -	$ -	$ 3,306,323	$ 883,000			**$ 4,189,323**
DASH Technology	RSTP	$ 200,000	$ -	$ 350,000	$ 255,745	$ -	$ -	$ -			**$ 805,745**
Backlick Run Multiuse Path Phase I	RSTP	$ 733,894			$ -	$ -	$ -	$ -			**$ 733,894**
Pedestrian & Safety Mobility Enhancements on Primary Corridors	RSTP	$ -	$ -	$ 914,811	$ 1,300,000	$ -	$ -	$ -			**$ 2,214,811**
Parking Technologies	RSTP	$ 1,403,365	$ 408,825	$ 250,000	$ -	$ -	$ -	$ -			**$ 2,062,190**
Transit Analysis Study	RSTP	$ 1,000,000	$ -	$ -	$ -	$ -	$ -	$ -			**$ 1,000,000**
Transitway Enhancements		$ 1,454,491	$ -	$ -	$ -	$ -	$ -	$ -			**$ 1,454,491**
Mount Vernon Avenue	CMAQ	$ 520,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,000,000		**$ 1,520,000**
Bicycle Parking at Transit	CMAQ	$ 505,000	$ -	$ -	$ -	$ -	$ -	$ -			**$ 505,000**
Bicycle and Pedestrian Improvements	RSTP	$ 340,000	$ -	$ -	$ -	$ -	$ -	$ -			**$ 340,000**
Van Dorn St-Beauregard St Multi-Use Trail (Bicycle Facility)	CMAQ/RSTP	$ 3,577,107	$ -	$ -	$ -	$ -	$ -	$ -			**$ 3,577,107**
City of AlexandriaTransportation Master Plan	RSTP	$ 840,077	$ -	$ -	$ -	$ -	$ -	$ -		$ 500,000	**$ 1,340,077**
Buy New Scheduling Software for DASH	CMAQ	$ 477,568	$ -	$ -	$ -	$ -	$ -	$ -			**$ 477,568**
CMAQ/RSTP Subtotal		**$ 20,185,857**	**$ 3,791,727**	**$ 4,485,582**	**$ 4,556,345**	**$ 3,885,331**	**$ 4,080,188**	**$ 4,156,000**	**$ 4,500,000**	**$ 4,500,000**	$ 54,141,030

City of Alexandria, Virginia

MEMORANDUM

DATE: NOVEMBER 17, 2021

TO: MEMBERS OF THE TRANSPORTATION COMMISSION

FROM: HILLARY ORR, DEPUTY DIRECTOR, T&ES

SUBJECT: AGENDA ITEM #7 – NVTA 70% DISCRETIONARY GRANT PROJECTS (FY26-27)

ISSUE: Discussion of the Northern Virginia Transportation Authority (NVTA) for transportation projects eligible under the 70% Discretionary Grant (FY26-27)

RECOMMENDATION: That the Commission discuss staff's recommended projects for the NVTA 70% Discretionary program.

BACKGROUND: HB2313 (2013) established a funding stream for transportation in Northern Virginia enabling the Northern Virginia Transportation Authority to address regional transportation challenges. HB2313 separates these funds into "70% Regional Revenues," which are allocated by the Authority to regional transportation projects; and "30% Local Distribution Revenues," which are distributed to localities for locally determined transportation projects and priorities.

The City initially intended to apply for funds to expand the Route 1 Metroway from E. Glebe Road to Evans Lane. The Transportation Commission approved this endorsement at its June 16, 2021 meeting.

In further discussions with NVTA, it became clear that the Alexandria portion of the Metroway is no longer in the regional plan, TransAction, and therefore it was ineligible for this round of NVTA funds. Alexandria staff are working with NVTA to ensure that the Alexandria portion of the Metroway extension is included in the next update of TransAction, currently underway.

For Fiscal Year 2026-2027, the City applied for two projects, including South Van Dorn Street and Bridge Design; and the Holmes Run Trail Dora Kelley Fair-weather Crossing Bridge. The project applications were due on October 1, 2021. After a brief discussion at the October 20, 2021 Transportation Commission meeting, the Commission provided a letter of support for the projects to be submitted to the NVTA (Attachment 1). The Commission indicated that the item should return for further discussion in November.

DISCUSSION: The City included the following two projects in the FY26-27 grant application:

South Van Dorn Street and Bridge Design (TransAction ID #42 - West End Transitway)
This project will design South Van Dorn Street and the Van Dorn bridges between Metro Road and McConnell Avenue to accommodate dedicated transit lanes for the future West End Transitway as well as improve non-motorized facilities along the bridges for better connections between new developments and the Van Dorn Metrorail station. Design would include structural, civil and traffic engineering as well as community engagement, environmental work, staff time and substantial contingency funds. The existing Van Dorn Street bridge currently includes a narrow sidewalk along the east side and no bicycle facilities. In 2016, the City completed the West End Transitway Alternatives Analysis and the Environmental Documentation was completed in 2017. A conceptual plan for the full build out of the transitway included dedicated bus lanes on Van Dorn Street for the transitway from Metro Road to the north and maintained existing vehicle travel lanes. The Eisenhower West Small Area Plan also recommends multimodal improvements to the South Van Dorn Street bridge. In FY 2022, the City will conduct a feasibility study that looks at traffic, concept options and develops more refined cost estimates to better understand the level of funding needed for design and construction in future years. Beginning the design of improvements in areas where the City has already acquired right of way makes the City very competitive for construction funds for this project.

Holmes Run Trail Dora Kelley Fair-weather Crossing Bridge (TransAction ID #90 – Alexandria Bike and Pedestrian Trails Construction and Reconstruction)
This project will replace and existing fair-weather crossing for the Holmes Run Trail with a prefabricated pedestrian and bicycle bridge. The fair-weather crossing is located approximately 400 feet north of the intersection of Beauregard Street and North Morgan Street in Dora Kelley Park. The project will allow trail users continuous, safe and reliable access to the City's off-street trail facilities, as well as other regional trails, and the future West End Transitway. The City is requesting FY23 funds for the design of this project so that construction could begin as soon as construction funds are received in FY26.

ATTACHMENTS:
Attachment 1: Transportation Commission Letter of Support for FY26-27 NVTA 70% Application

Attachment 1

Alexandria Transportation Commission
301 King Street
www.alexandriava.gov Alexandria, VA 22314 Phone: 703.746.4025

Monica Backmon, CEO
Northern Virginia Transportation Authority (NVTA)
3040 Williams Drive, Suite 200
Fairfax, Virginia 22031

October 20, 2021

Re: Letter of support for grant applications for: FY 2026 – 27 NVTA 70% Discretionary Grant

Dear Monica Backmon:

At its October 20, 2021 meeting, the Alexandria Transportation Commission voted to provide this letter of endorsement in support of the proposed grant applications for the FY 2026-FY 2027 NVTA 70% Discretionary Grant:

- Up to $5 million toward the South Van Dorn Street / Bridge design (TransAction Project #42 – West End Transitway); and
- Up to $5 million toward the Holmes Run Trail Dora Kelley Fair-weather crossing bridge construction (TransAction Project #90 – Alexandria Bike and Pedestrian Trails Construction and Reconstruction)

The Transportation Commission appreciates the opportunity to review staff recommendations for this important grant program. This grant and recommended projects are consistent with the City's Transportation Master Plan and will help to make Alexandria a more sustainable, accessible and safe city with enhanced multi-modal transportation options.

Sincerely,

Melissa McMahon
Chair, Alexandria Transportation Commission

cc: Alexandria Transportation Commission
Mark Jinks, City Manager
Yon Lambert, Director, T&ES

City of Alexandria, Virginia

MEMORANDUM

DATE: NOVEMBER 17, 2021

TO: MEMBERS OF THE TRANSPORTATION COMMISSION

FROM: HILLARY ORR, DEPUTY DIRECTOR, T&ES

SUBJECT: MID-TERM AMMENDMENT TO THE TRANSPORTATION LONG RANGE PLAN FOR VISION ZERO HIGH CRASH INTERSECTION IMPROVEMENTS PROJECT

ISSUE: Mid-term amendment to the Transportation Long Range Plan (LRP).

RECOMMENDATION: That the Transportation Commission review the proposed mid-term LRP amendment of a Vision Zero High Crash Intersection Improvements project and consider approval.

BACKGROUND: The Commission is responsible for developing and maintaining a comprehensive Transportation Long Range Plan (LRP) that prioritizes long-range transportation projects. The LRP is an unconstrained list of all transportation related capital projects and studies identified in City plans and policies with no identified funding source.

Every two years, the Commission updates the LRP projects and studies from plans adopted since the last update. New projects to add to the LRP (from approved plans) are major projects that are unfunded, and that are not anticipated to be implemented through another funding sources. Projects and studies are removed if they have been completed or funded in the City's CIP. While staff maintains a list of developer contingent projects as part of each update, the Commission is only responsible for prioritizing projects that require coordination with developer actions or funding.

DISCUSSION: During the Alexandria Mobility Plan (AMP) process, some community members were concerned that the AMP did not sufficiently support Vision Zero and transportation safety and requested that staff present the Transportation Commission with an amendment to the LRP for "Vision Zero High Crash Intersection Improvements." While staff currently analyzes and improves high crash intersections for safety, specifically identifying this as a "project" would support grant applications and additional funding needs and signal the seriousness with which Alexandria is treating Vision Zero. Because these intersections can change from year to year depending on data (as opposed to sidewalk gaps, for example), the intention is to avoid naming specific intersections.

If amended, the new LRP item would appear as unranked on the 2020 LRP – Projects List until the official 2022 update as shown in Attachment 1. All other lists (Studies and Developer Projects) would remain the same.

ATTACHMENTS:

Attachment 1: 2020 LRP – Projects List with Proposed Amendment

City of Alexandria Long-Range Plan
November 13, 2020

FINAL

PROJECTS

ID	2018 Rank	2020 Rank	Name	Description	Source	Category	Mode	Cost	Estimated Start	Status	Relationship to Other Initiatives	Notes	
NEW	NEW	Unranked	Vision Zero High Crash Intersection Improvements	Address safety issues at high crash intersections throughout the City as identified using Vision Zero's data analysis.	Vision Zero Action Plan	Project	Streets	Less than $1 million	1-5 years	Ongiong	Yes	Amendment to 2020 LRP	
19	NEW5	1	Landmark Transit Hub	10.1.17. Provide an urban transit hub within the neighborhood as generally depicted in Figure 9 (of Chapter 10 of the Landmark/Van Dorn SAP) to serve as a stop and transfer point for bus rapid transit, DASH, and Metro Bus service. Bus stops will be provided as onstreet parallel spaces.	Landmark/Van Dorn SAP	Project	Transit	More than $5 million	0-10 years	Not Started	Yes		
13	2	2	Priority Sidewalk projects in the 2016 Pedestrian and Bicycle Chapter of the Transportation Master Plan	Sidewalks projects were prioritized for the 2016 update to the Ped/Bike Chapter of the Master Plan. This project is to continue completing improvements for a total of 11.5 miles of new/improved sidewalks.	Pedestrian and Bicycle Master Plan	Project	Pedestrian	More than $5 million	10+ years	Ongoing	Yes	NEW PROJECT	x
1	3	3	Upper King Street Multimodal Redesign (Quaker Lane to N. Hampton)	Construct new sidewalks along the north and south sides of King Street, including over I-395, where missing. This project improves important pedestrian safety and connectivity along a street with higher volumes and speeds, and a history of pedestrian fatalities.	Pedestrian and Bicycle Master Plan	Project	Pedestrian	More than $5 million	5-10 years	Not Started	Yes	Could be coordinated with an enhanced bicycle facility which was also recommended in the Pedestrian and Bicycle Master Plan as a priority project.. Staff proposes to change the name of this project to "Upper King Street Multimodal Redesign"	x
5	12	4	Sanger Avenue Bridge	Widen the underpass of Sanger Avenue at I-395 to allow for a future transitway and non-motorized facilities.	Pedestrian and Bicycle Master Plan	Project	Streets	More than $5 million	5-10 years	Not Started	Yes	The Transportation Master Plan identified three transitway corridors, including Corridor C (West End Transitway).	x
17	NEW3	5	Interim and Permanent Pedestrian Crossing Improvements on Eisenhower Avenue at Metrorail Station	Rec #69: Provide an enhanced pedestrian crossing on Eisenhower Avenue at the Eisenhower Avenue Metrorail Station consistent with Figure 15.	Eisenhower East	Project	Pedestrian	$1-5 million	10+ years	Not Started	Yes		
14	5	6	Priority bike trail projects in the 2016 Pedestrian and Bicycle Chapter of the Transportation Master Plan	Bike and multi-use trail projects were prioritized for the 2016 update to the Ped/Bike Chapter of the Master Plan. This project compiles at least 7 of the 10 prioritized projects that call for the construction of 4.8 miles of new trails.	Pedestrian and Bicycle Master Plan	Project	Ped/bike	More than $5 million	10+ years	On Hold	Yes	NEW PROJECT	x
3	11	7	Madison Street Bike facility	This project provides east-west connectivity in North Old Town and to the Mt. Vernon Trail and Braddock Metrorail Station. Madison Street would be an enhanced bicycle corridor that may remove one travel lane.	Pedestrian and Bicycle Master Plan	Project	Bicycle	Less than $1 million	1-5 years	Not Started	No	This is a priority project in the Pedestrian and Bicycle Master Plan. The Madison Street enhanced bicycle facility is also being analyzed as part of the Old Town North Small Area Plan. Staff proposes to prioritize this project in the long-term.	x
18	NEW4	8	S. Patrick Street Pedstrian Improvements	Extending S. Patrick Street median south of Franklin Street/other traffic calming. P39	S. Patrick Street Housing Strategy	Project	Streets	Less than $1 million	20+ years	Not Started	Yes		x
11	15	9	Connection between Potomac Yard Park to Mount Vernon Trail	Provide a future connection from Potomac Yard Park across the George Washington Memorial Parkway to the Mount Vernon Trail.	North Potomac Yard SAP	Project	Ped/bike	More than $5 million	10+ years	Not Started	Yes	NEW PROJECT	
4	14	10	Non-motorized bridge over Cameron Run	Construct a non-motorized bridge across Cameron Run between the Eisenhower Valley and Cameron Station / Ben Brenman Park.	Eisenhower West Small Area Plan	Project	Pedestrian	More than $5 million	5-10 years	Not Started	No	This project has been carried over from 2016 list	x
16	NEW2	11	Interim Bike Facility on Eisenhower Ave	Rec #75: Explore options for an interim bike facility on Eisenhower Avenue.	Eisenhower East	Project	Bicycle	Less than $1 million	0-10 years	Not Started	Yes		x
12	17	12	Multimodal Bridge over Norfolk Southern Tracks to Connect Eisenhower Avenue and S. Pickett Street	The Multimodal Bridge provides a multimodal connection between Eisenhower Metro and other development (new and existing) North of Pickett Street.	Eisenhower West Small Area Plan	Project	Multimodal	More than $5 million	10+ years	Not Started	Yes	MEW PROJECT	x
2	10	13	Commonwealth Avenue nonmotorized bridge	Construct new pedestrian/bicycle bridge over Four Mile Run to link Commonwealth Avenue to S. Eads Street.	Four Mile Run Restoration Plan	Project	Bicycle	More than $5 million	5-10 years	Not Started	Yes	This project is identified as a demonstration project in the Four Mile Run Plan. It is currently being designed but has no construction funding identified. This project has been moved from the 2016 list	x
10	9	14	Norfolk Southern Rail spur in OTN converted into multi-use path	Improve the Norfolk Southern rail corridor adjacent to the former power plant site to include a separated pedestrian and bicycle paths through the planned linear park.	Old Town North SAP	Project	Ped/bike	More than $5 million	5-10 years	Not Started	Yes	NEW PROJECT	x
15	NEW1	15	Removal of Ramp Structure over Duke Street	10.1.10 - Remove ramp and reconfigure Duke Street	Landmark/Van Dorn SAP	Project	Streets	More than $5 million	10+ years	Not Started	Yes		x
8	19	16	Edsall Road Connector to Farrington Avenue and South Pickett Street (farrington connector)	Construction of new roadway along the Fairfax County line to connect Edsall Road, South Pickett Street, and Farrington Avenue to relieve traffic congestion on sections of South Van Dorn Street and to provide direct access to the Eisenhower Avenue corridor and the Van Dorn Street Metrorail Station.	Eisenhower West Small Area Plan	Project	Streets	More than $5 million	10+ years	Not Started	Yes	As development takes place in Alexandria or Fairfax County between Edsall Road and Pickett Street or along Farrington Avenue. ~~To be further evaluated in Eisenhower West Plan.~~ The Eisenhower West Small Area Plan further examined this project which would require both public and developer funding, and more detailed roadway design and analysis will be conducted as part of the Eisenhower West/Landmark Van Dorn Implementation Plan..	x
6	18	17	S. Van Dorn Intersection Improvements	Intersection improvements along S. Van Dorn Street at Edsall Road (Add WB right turn lane), Eisenhower Avenue (Add EB thru lane, WB thru lane), and future Main Street. These intersection improvements are needed in the long term to support additional density planned in Eisenhower West.	Eisenhower West Small Area Plan	Project	Streets	$1-5 million	5-10 years	Not Started	Yes	Staff proposes to prioritize this project accodring to the timing of development of the area in the long-term	x
14	8	18	Commonwealth Ave. Green Street	Move the Comonwealth Ave. turnabout to the entrance at the parking lot and convert the .25 acres of underused portion of Commonwealth along the edge of field #2 to a working open space.	Four Mile Run Restoration Plan	Project	Pedestrian	Less than $1 million	5-10 years	Not Started	No	Project has been carried over from 2016 list	x
12	20	19	I-395 access to West End Town Center	Direct access from I-395 ramps to West End Town Center (With developer)	Landmark/Van Dorn SAP	Project	Streets	More than $5 million	10+ years	Not Started	Yes	Prioritized in the long-term	x

City of Alexandria, Virginia

MEMORANDUM

DATE: NOVEMBER 17, 2021

TO: MEMBERS OF THE TRANSPORTATION COMMISSION

FROM: CHRISTOPHER ZIEMANN, DIVISION CHIEF, TRANSPORTATION PLANNING

SUBJECT: AGENDA ITEM #10 – ITEMS FOR CONSENT

ISSUE: Staff update to Transportation Commission on various projects.

RECOMMENDATION: That the Commission receive the items for consent.

A. Ellipse Reevaluation Study

In 2012, the Beauregard Corridor Plan Traffic Impact Analysis was prepared to analyze the transportation impacts associated with proposed development in the Beauregard planning area. The study analyzed traffic impacts at 32 intersections within the plan area and identified the necessary transportation improvements needed to sustain future development and projected population growth. One of the improvements identified was a unique design called "the Ellipse" within the N. Beauregard Road and Seminary Road intersection.

However, due to the expected reduction in development and updated traffic data, the city will reevaluate the Ellipse concept and explore other alternatives to address existing and projected traffic conditions within the study area.

The study will include analysis of the Seminary Road and N. Beauregard Street intersection, as well as surrounding intersections, in several scenarios to determine the preferred design alternative that not only addresses projected traffic capacity but aligns with the City's vision and goals.

The City plans community engagement efforts throughout this process to ensure community feedback is included in the design alternative evaluation. The study is slated to be completed in Fall 2022. Soon after, the city will work to secure funds for design and construction through grant opportunities and developer contributions.

B. AlexMoves Survey

The City is working with the polling and research firm Polco to facilitate a survey on multimodal transportation trends and preferences across the City. This survey will build off past surveys completed in 2016 and 2018 to help identify transportation trends overtime.

Households across Alexandria were randomly selected to receive mailings asking an adult member of their household to participate in a statistically significant survey on their transportation habits running from late September to early November. There is also an open-participation version of the survey available to all Alexandria residents at https://polco.us/alex2021 through November 20 to allow other residents to have a chance to provide their input. The results may supplement the statistically significant survey, but the responses will be considered separately.

Polco will compile and analyze survey results, with a report of the results available in February 2022. The report is anticipated to provide information such as modal share for commute and non-commute trips in different areas of the City and what factors are mostly likely to encourage residents to walk, bike, and drive. For reference, the Report of Results from the 2016 survey is available here**.** A presentation of 2018 survey is available here.The results of the 2021 study are intended to:

- Inform and justify capital project priorities throughout the City
- Inform relevant transportation studies required of Development Special Use Permit applications
- Assist with the development of progressive yet attainable mode share goals for Transportation Management Plans, which are conditioned through the Development Special Use Permit (DSUP) process
- Provide performance measurement data for the Alexandria Mobility Plan
- Supplement the region's "State of the Commute Report."

Staff will provide an overview of the results of the 2021 survey in February or March 2022.

C. Duke Street Traffic Mitigation Pilots

The Duke Street corridor has long been associated with evening congestion that results in regional cut-through traffic on neighborhood streets. While there are broader City goals to reduce single-occupancy vehicle travel and increase transit ridership to reduce congestion in the region, many strategies to effectively work toward these goals are longer-term. From the community engagement during the Alexandria Mobility Plan update, the Duke Street In Motion project, and from the annual resident survey, the City recognizes that traffic congestion is still a priority for residents impacting quality of life. Staff have been working with the community to address concerns about cut-through traffic on neighborhood streets.

Because the City now has access to the StreetLight data platform to analyze traffic impacts, staff is proposing a pilot project to change signal timing on arterials and residential streets and evaluate how driver behavior changes in response. The plan is to increase green signal times along Quaker Lane and Duke Street between Quaker Lane and the Telegraph Road access ramp and decrease green time on residential streets. The goal is to reduce travel times on the arterials and make cutting through on neighborhood streets a less desirable and slower option.

The pilot would likely run for three months- from January through March 2022. Staff has met with civic associations and will continue outreach this fall. Engagement efforts, presentations and more information on the proposed pilots is posted on the Project Website.

D. TransAction

Transaction is the Northern Virginia Transportation Authority's long-range plan. For the City to be competitive for NVTA 70% grant funds, a project must be included in Transaction. Over the summer, NVTA conducted a survey to seek feedback on travel behaviors, transportation needs and priorities. City communications helped to spread the word about the opportunity for engagement and pop-ups were held throughout the region.

More than 2,300 people took the TransAction survey. The results show improved travel time reliability is a priority, no matter where you reside in Northern Virginia. People are seeking multimodal options to keep NoVA moving and want to see a reduction in traffic congestion.

The factors that will most affect mode choice, include: 1) trip distance (76%); 2) travel time reliability (60%); 3) traffic congestion (51%); and 4) access to frequent transit (49%).

Survey takers were given 10 hypothetical coins representing $1M each and were asked to distribute them between six project types. Regionally, road improvements and transit improvements received the most virtual investment, but all modal options received a significant amount of funds.

Full results can be found here.

The TransAction planning process takes about two years to complete, with opportunities for public input along the way. The timeline below provides a high-level overview of the process, including public engagement activities:

- Summer/Fall 2021: Public engagement to identify transportation needs and trends
- Summer/Fall 2022: NVTA hosts Open House and Public Hearing; public comment period on Draft TransAction Plan
- Early Fall 2022: Finalize TransAction update
- Late Fall 2022: Authority adopts TransAction

NVTA committees are currently providing input on how to weight performance measures for the plan for a December consideration by the Authority. The three committees have all endorsed the following goals, objectives, and measures:

Goal	Objective	Performance Measure	Alignment with Core Values
Mobility: Enhance quality of life of Northern Virginians by improving performance of the multimodal transportation system	A. Reduce congestion and delay*	A1. Total Person-Hours of Delay in autos	
		A2. Total Person-Hours of Delay on Transit	
	B. Improve travel time reliability*	B1. Duration of Severe Congestion	
		B2. Transit person-miles in dedicated/priority ROW	
Accessibility: Strengthen the region's economy by increasing access to jobs, employees, markets, and destinations for all communities	C. Improve access to jobs*	C1. Access to jobs by car, transit, and bike	
		C2. Access to jobs by car, transit, and bike for EEA populations	
	D. Reduce dependence on driving alone by improving conditions for people accessing transit and using other modes	D1. Quality of access to transit and the walk/bike network	
Resiliency: Improve the transportation system's ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.	E. Improve safety and security of the multimodal transportation system	E1. Potential for safety and security improvements	
	F. Reduce transportation related emissions	F1. Vehicle Emissions	
	G. Maintain operations of the regional transportation system during extreme conditions*	G1. Transportation System Redundancy	

* Measure included in HB 599 rating process.

NVTA's TransAction

E. Metro Train Derailment

Metrorail service will remain at the current reduced levels through at least the end of November as Metro continues to work with the Washington Metrorail Safety Commission on a plan to get 7000-series railcars safely back into service. Metro is continuously adding additional trains into service after thorough inspections. Blue Line service is now at 30-minute frequencies and yellow line service is at 20-minute frequencies

F. Bus Service and Ridership

In addition to the New DASH Network, Metrobus increased service in September with the introduction of 12- and 20-minute networks and additional service and service hours restored on other routes. Ridership on these services with increased frequencies has been quite strong. The 28A, which changed routing in accordance with the Alexandria Transit Vision Plan to go along Duke Street and Jordan increased service to join the 12-minute network. Through September and the first half of October, the 28A experienced an increase of approximately 25% in ridership to about 4,000 daily riders. The 29K/N on Duke Street, which joined the 20-minute network, increased ridership by almost 37% to just under 2000 daily riders.

In September, the peak-only service was re-introduced and increased, including the 8W, the 11C (the replacement to the 11Y) and the 21C (combination of the former 21A and 8Z routes). These peak-only services also saw significant ridership increases on a percentage basis (from an average of 27 to 48 riders on the 11C and from 72 to 118 riders on the 21C). The 22F increased from an average of 75 riders to 98.

Due to a driver shortage, WMATA will have to make minor cuts to service in Alexandria at the end of December. On the 22F/28F, which is coordinated along Skyline City, frequency will be reduced from every 20 minutes to every 30 minutes. The 11C will also see decreased frequencies from every 24 minutes to every 30 minutes. The 11C currently only has an average of four passengers per trip and the 22F/28F has five.